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SEMICONDUCTOR TRADE AND JAPANESE TARGETING

HEARING

BEFORE THE

SUBCOMMITTEE ON INTERNATIONAL FINANCE
AND MONETARY POLICY

OF THE

COMMITTEE ON
BANKING, HOUSING, AND URBAN AFFAIRS
UNITED STATES SENATE

NINETY-NINTH CONGRESS

FIRST SESSION

ON

THE PROBLEMS OF UNFAIR TRADE PRACTICES AND JAPANESE
BARRIERS TO TRADE IN THE SEMICONDUCTOR INDUSTRY

JULY 30, 1985

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SEMICONDUCTOR TRADE AND JAPANESE TARGETING

TUESDAY, JULY 30, 1985

U.S. SENATE, COMMITTEE ON BANKING, HOUSING, AND URBAN AFFAIRS, SUBCOMMITTEE ON INTERNATIONAL FINANCE AND MONETARY POLICY,

Washington, DC.

The subcommittee met at 9:40 a.m., in room SD-538, Dirksen Senate Office Building, Senator John Heinz (chairman of the subcommittee) presiding.

Present: Senators Heinz, Gorton, Mattingly, Hecht, D'Amato, Proxmire, Dixon, Riegle, and Cranston.

OPENING STATEMENT OF SENATOR HEINZ

Senator HEINZ. Ladies and gentlemen, good morning. I don't think our microphone system is working too well this morning due to the power failure that seems to have caught up all of Capitol Hill.

As I think many of you are aware, the subcommittee will today be looking at the problems of unfair trade practices and Japanese barriers to trade in the semiconductor industry. Last month the Semiconductor Industry Association [SIA] filed a petition for relief under section 301 of the Trade Act of 1974. An antidumping suit against Japanese producers was also filed by one of today's witnesses. While the Banking Committee does not have jurisdiction over enforcement of the trade laws, it does have oversight responsibility for U.S. trade policy and export promotion, and these actions are an excellent starting point for analysis of the problems facing a highly competitive and critical high-tech industry, the semiconductor industry.

Trade disputes with Japan have been a growing problem in recent years. Our bilateral deficit has mushroomed from $12 billion to $37 billion in 5 short years, now accounting for one-third of our worldwide trade deficit. Japanese trade negotiators contend that this imbalance can be explained completely by the growing strength of the dollar. There is obviously some truth to this claim, but I strongly suspect that even after the dollar has descended from its lofty heights, the massive trade imbalances with Japan will remain. Germany and Korea, both strong trading nations, have had little success in penetrating the Japanese market in recent years despite having weak currencies relative to the yen.

As I have said on a number of occasions, the problem is not the dollar alone. Equally as important—if not more important—is Japanese protectionism. Protection of infant industries, protection of declining industries, protection of agriculture, protection of a wide variety of special interests representing everything from potato chips to computer chips.

Prime Minister Nakasone has just announced the sixth market opening packaging in 4 years. None of the others has done much good, and I suspect that the current one will have just about the same effect. I would argue that the time is long past for continued discussion and negotiations. These endless negotiations seem to have taken on the character of an elaborate con game, with the United States as the willing dupe. The Japanese have no incentive to make meaningful changes in their market structure because they are confident that we will never take any action against them.

I have argued that we need to break out of this frustrating cycle of U.S. complaints followed by meaningless reforms followed by renewed complaints. My solution would be to place a 20-percent surcharge on all Japanese products. It is a sure way to alter the trade imbalance in our favor, and its debate in Congress is a strong, unambiguous signal of U.S. seriousness on this issue. Every other solution has failed. It is only through decisive political action that we can hope to break out of the downward spiral in which we find ourselves.

The situation with regard to semiconductors is a case in point. The Japanese semiconductor market was officially protected until 1975. Yet despite its having been officially aimed at assuring U.S. producer access, there is virtually no difference for American firms between 1973 and 1984. Last year United States firms accounted for 11.4 percent of Japanese consumption, an almost identical market share to that which they held 11 years earlier when the market was officially protected.

Today we will be hearing from the two members of the administration most immediately involved in negotiating with the Japanese on trade issues. As frontline soldiers in the battle, I am sure they will have valuable insights to share with the subcommittee. We will also be hearing from a distinguished panel of the private sector companies most immediately affected by Japanese barriers and trade practices. I am personally aware of their reluctance to seek relief under the Trade Act. I know that their preference would have been to simply compete on the open market if that option had been open to them. I am, therefore, eager to hear their reasons for filing their petition and their perspective on solutions to our vexing problem with Japan.

Before we hear from our witnesses, though, I would like to ask our colleagues for any opening statements. Senator Proxmire, the ranking minority member, I yield to you.

Senator PROXMIRE. Thank you, Mr. Chairman.

OPENING REMARKS OF SENATOR PROXMIRE

Mr. Chairman, I especially like and appreciate your reference to potato chips and computer chips. I thought you were going to join the 57 varieties.

Today we begin the first of a series of hearings that will focus on America's massive trade deficit with particular attention to our growing trade imbalance with Japan. We will attempt in this series of hearings to learn more about the root causes of our trade difficulties and seek to determine what actions our Government can take to remedy the situation.

This subcommittee also held hearings on our trade problems last year. One witness, Martin Feldstein, the President's Chairman of the Council of Economic Advisers, told us that the trade deficit existed primarily because the real value of the dollar had increased about 45 percent relative to the average of the currencies of other industrialized nations in the period from 1981-84. Dr. Feldstein also said that this rapid increase was caused by massive increases in the Federal budget deficit. He said that the only way to improve our trade imbalance was to reduce our Federal budget deficit. Most of our other witnesses, including Paul Volcker, Chairman of the Federal Reserve Board, agreed with Dr. Feldstein's analysis.

The President's Special Trade Representative, Mr. Brock, told the Finance Committee that reducing our Federal deficit was essential to remedying our trade picture. Our businessmen engaged in the trade battle agreed. Lee Iacocca said recently that the root cause of our trade problem is the budget deficit and I agree.

This is both encouraging and discouraging news. It means a big part of curing our trade problem is within our own control. The question is whether we will find the courage to cut Federal spending, increase Federal revenues, and end budget deficits.

Before Congress will act, Americans will have to realize there is no free lunch. If they demand too many services of their Government and refuse to tax themselves to pay for them, they will pay in another manner, as we are now finding out—job losses caused by increased imports and loss of exports.

I want to make clear, however, that our imbalance of trade with Japan is caused by more than our budget deficit and the resultant misaligned exchange rates. There is a general consensus that in other countries as well that the Japanese do not play fair when it comes to trade. They want to sell manufactured goods to other countries but do not want to buy any themselves. They will buy raw materials but not finished products.

In 1979 Japan exported $90 billion in manufactured goods while importing only $24 billion of such products. In 1983, 4 years later, Japan's trade imbalance in manufactured goods with the rest of the world was even worse. It exports 141 billion dollars' worth of such goods while importing only $28 billion from others.

I'd like unanimous consent at this point to insert in the record a copy of a chart showing the imbalance in Japan's trade and manufactured goods. That country imports only products it actually needs.

Mr. Chairman, I have a longer statement but I ask unanimous consent that the remainder be printed in the record as if read.

Senator Heinz. Without objection, so ordered.

[Complete prepared statement follows:]

STATEMENT OF SENATOR WILLIAM PROXMIRE

Senator Proxmire. Today we begin the first of a series of hearings that will focus on America's massive trade deficit with particular attention on our growing and increasingly contentious trade imbalance with Japan. We will attempt in this series of hearings to learn more about the root causes of our trade difficulties and seek to determine what actions our Government can take to remedy the situation.

This subcommittee also held hearings on our trade problem last year. One witness, Martin Feldstein, the Chairman of the President's Council on Economic Advisers, told us the trade deficit existed primarily because the real value of the dollar had increased about 45 percent relative to an average of the currencies of other industrial nations between 1981-84. This rapid increase in the value of the dollar, Dr. Feldstein told us, was caused by massive increases in the Federal budget deficit. He stated that a key step to remedy our trade deficit was to reduce our Federal budget deficit. Most of our other witnesses, including Paul Volcker, Chairman of the Federal Reserve Board agreed with Dr. Feldstein's analysis. Last year when Secretary of Labor Brock, was the President's Special Trade Representative, he told the Finance Committee that reducing our Federal deficit was essential to remedying our trade picture. Our businessmen who are on the front lines of the trade battle agree. Lee Iacocca, the chairman and chief executive officer of the Chrysler Corp. said recently that the root cause of our trade problem is the budget deficit. I agree.

This is both encouraging and discouraging news. It means a big part of curing our trade problem is within our own control. The question is whether we will find the courage to cut Federal spending, increase Government revenues, and end runaway budget deficits. Before Congress will act Americans will have to realize there is no free lunch. If they demand too many services of their Government, and refuse to tax themselves to pay for them—they will pay in another manner, as we are now finding out. Budget deficits will result in job losses caused by increased imports and a loss of exports.

I want to make clear, however, that our imbalance of trade with Japan is caused by more than our budget deficit and resultant misaligned exchange rates. There is a general consensus among businessmen in our country, and in other countries as well, that the Japanese don't play fair when it comes to trade. They want to sell manufactured goods to other countries—but don't want to buy any themselves. They will buy raw materials—but not finished products.

In 1980, even before our exchange rates with Japan became misaligned, we experienced a $12 billion trade deficit with Japan. That rose to $22 billion in 1983, to $37 billion in 1984 and may reach $50 billion this year. Despite this deficit the United States has continued to maintain relatively open markets for Japanese products; but the Japanese market is virtually impenetrable for a number of United States produced goods. The inability to market manufactured goods in Japan is a problem experienced by other countries whose exchange rates are not misaligned. In 1979 Japan exported $98 billion in manufactured goods while importing only $24 billion of such products. In 1983 Japan's trade imbalance in manufactured goods with the rest of the world was even worse—it exported 141 billion dollars' worth of such goods—while importing only $28 billion from others. Actually our country does better in selling manufactured goods to Japan than does any other country. I would like to put in the record at this point a copy of a chart showing the imbalance in Japanese trade in manufactured goods. That country imports only products it absolutely needs. Two years ago our Deputy Special Trade Representative told Congress that when a United States manufacturer tries to market a superior manufactured product in Japan, that competes with existing Japanese products the home market closes. Secretary of Commerce Baldrige has told us that really free trade with Japan would reduce our bilateral trade gap with that country by $12 billion a year.

Let's give the Japanese credit. They have been more creative than others in integrating their domestic infrastructure and their trade policy. Over the decades the two have worked hand in glove. An opportunity to create a new industry is seen. The walls around Japan rise to foreign import while an infant industry is nurtured behind the protective walls. America could tolerate such infant industry protection after the war when Japan was rebuilding. We cannot tolerate it now.

But it is not just trade barriers that have allowed the Japanese to do so well. Their consumer goods R&D effort is far higher than ours and is focused in areas of opportunity for greater value added exports. Our own R&D is heavily oriented to defense.

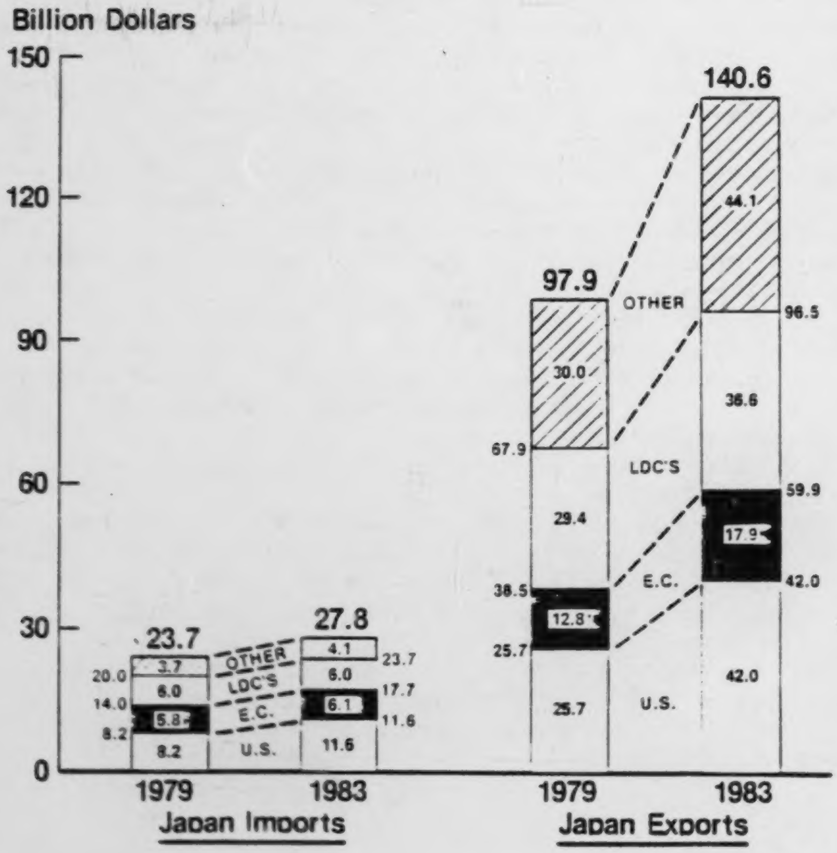
Japan's education system produces more college graduates in engineering than ours. It generates 50 percent more electrical engineers in a population base half the size of ours.

So Americans, all of us in both Government and industry, must pull our socks up and get to work if we want to meet the trade challenge of the 1980's and 1990's. I hope we will do that. The Japanese, in turn, must open their markets. They must realize that free trade won't last unless it's fair.

Mr. Chairman, I commend you for holding these hearings and look forward to hearing from our witnesses.

[The chart showing imbalance in Japanese trade in manufactured goods follows:]

JAPANESE TRADE IN MANUFACTURED GOODS



Source: GATT

Senator HEINZ. The Chair observes that Senator D'Amato was present at the beginning of the hearing. He has a conflict with another committee and he asked unanimous consent that his opening statement be placed in the record as if read in full.

STATEMENT OF SENATOR D'AMATO

Senator D'AMATO. Mr. Chairman, I commend you for holding this hearing on barriers to trade in the semiconductor industry. This industry is the most recent victim of unfair trade practices by our trading partners.

Today, the U.S. trade deficit totals an unprecedented $123 billion. It is not surprising that Japan is the country responsible for much of the domestic semiconductor industry's woes since Japan is also the largest contributor to our Nation's trade deficit to the tune of $37 billion.

Semiconductor trade must be viewed within the larger context of the U.S. competitiveness in the high-tech sector, a sector which commands an increasingly larger share of American trade in manufactured goods. Last year, high-tech goods accounted for 43 percent of exports and 25 percent of our imports. However, it is extremely troubling to learn that our high-tech trade surpluses have significantly declined, from $26.6 billion in 1980 to a mere $6.2 billion in 1984.

The semiconductor industry is the leader in the high-tech sector. In 1984, it employed approximately 200,000 workers and generated more than $20 billion in sales. The Japanese, however, seem determined to dominate the industry and are using unfair tactics to accomplish this goal.

Here, in the United States, Japanese companies are dumping their semiconductors in our market. In Japan, they have erected nontariff barriers that make their market impenetrable to foreign—that is, United States—companies. For instance, the Japanese Government provides their electronics industry with promotional subsidies, interest-free or low-interest loans, and anti-trust exemptions. Now, the United States semiconductor industry doesn't mind competition, but it should not be forced to compete against the Treasury of Japan.

Mr. Chairman, the United States stands for fair trade; we are not afraid to compete with any of our trading partners. However, some refuse to play by the rules and continually seek unfair methods to gain an edge. Japan is one of these nations.

It is time that we got tough with the Japanese. I am not in favor of protectionist legislation, but I refuse to sit idly by and watch important industries, like the semiconductor industry, be destroyed by a nation who plays by its own rules.

Mr. Chairman, I thank you for this opportunity to make these remarks this morning.

Senator HEINZ. Senator Mattingly.

OPENING REMARKS OF SENATOR MATTINGLY

Senator MATTINGLY. Thank you, Mr. Chairman. I don't have any official statement for the record. I do have some questions I'd like to leave because I have to go preside in the Senate, but one thing

I'd like you to address if you could this morning: I think Japan has ended up being the punching bag for all of our trade problems. I don't think it's just Japan. I believe there are a lot of other countries that are also providing unfair subsidies and barriers that preclude us from trading in the international markets.

I'd like to ask one question, and when the time comes I wish you could address this: How many more laws do we need to put on the books? It seems to me there are sufficient laws on the books already. I imagine that this week we will try again to pass a bill that is the same as a resolution that we passed before bashing Japan. It will probably pass unanimously, despite the fact that last year this Congress passed the 1984 omnibus trade bill which had a reciprocity section in it. Therein lies, I think, the answer to several of our problems, whether it be high tech or whether it be anything else—who is going to comply with the laws that are currently on the books? It seems to me it borders on the ridiculous for us to continue passing laws in the U.S. Senate and House of Representatives when there isn't anybody enforcing them.

So I would hope that this issue would be addressed here today. Thank you, Mr. Chairman.

Senator HEINZ. Senator Gorton.

STATEMENT OF SENATOR SLADE GORTON

Senator GORTON. Mr. Chairman, I share many of the concerns you have already expressed. I have listened to the statement of Senator Proxmire and find nothing with which I can take exception in that statement as well.

Although many sectors of the American economy have been harmed by Japanese resistance to our products, the problems encountered by the semiconductor industry are especially egregious. I welcome this opportunity to talk with U.S. negotiators and industry officials. This morning's paper announced another market opening plan by the Japanese Government. While it's impossible to comment on this plan without knowing the specifics and seeing its effects, I do feel that past history justifies a degree of skepticism.

Japan's past history has been characterized by repeated assurances of greater access but no significant increase in purchases. The semiconductor industry is well aware of this, as Senator Heinz pointed out. When the Japanese market was formally protected by the Government before 1975, the United States semiconductor industry had approximately 10 to 11 percent of the market. In 1984, after a long series of liberalization measures, U.S. firms' share of the market remained at 11 percent. This, despite the industry's recognized global leadership in the field and its extensive long-term commitment to expand its presence in Japan.

There are numerous other goods and services about which the same statement could be made, Mr. Chairman. The failure of negotiations to achieve meaningful improvements in access to Japanese markets prompted me to introduce legislation in April designed to give the Japanese incentives to open their markets. The central feature of that bill is a graduated surcharge which is linked to our trade deficit. This formula reflects my firm belief that we must shift our attention away from talk and toward the bottom line—increased Japanese purchases of American goods.

Mr. Chairman, I look forward to what our witnesses have to tell us.

Senator HEINZ. Thank you, Senator Gorton.

Senator Hecht.

Senator HECHT. Thank you, Mr. Chairman. No statement.

Senator HEINZ. Senator Cranston.

OPENING STATEMENT OF SENATOR CRANSTON

Senator CRANSTON. Thank you very much, Mr. Chairman.

I joined with Senator Riegle and others in requesting this opportunity to hear from key administration officials and leaders of the semiconductor industry because I believe the challenge confronting this industry is of such very great importance. It's not just important to the men and women who work in this industry and the owners and investors; it's also vital to the future health of the American economy. Regardless of where one stands on the philosophical debate between free trade or protectionism and industrial policy versus laissez faire economics, the simple fact is that we cannot afford to let our high-tech industries be undermined by unfair foreign competition.

Japanese producers, which protects their own domestic markets, are systematically dumping semiconductors in the United States at far below their own production costs. These predatory trade practices are unfair to American industry and to American workers and they do grave injury to the effort to assure a free and stable international trading environment.

I believe in the freest possible trade, but if it's not fair it is not free. I oppose unnecessary Federal Government intervention in our domestic industrial development, but our Government cannot stand idly by when an industry that's a vanguard of our future industrial growth, the semiconductor industry, is undermined by outrageously unfair foreign practices. Inaction in such a case amounts to unilateral disarmament in international trade competition.

For this reason I recently endorsed and joined in strong support the petition filed by the Semiconductor Industry Association seeking urgent relief from the executive branch.

I recently met with the Japanese Ambassador in Washington to express my deep concern about the harm to our important bilateral relationship. I also wrote a letter to the Ambassador in which I was joined by virtually all of the California delegation underscoring our concerns regarding the future of the semiconductor industry. I would like to include that letter to Ambassador Matsunaga in the hearing record at this point and also include a copy of my letter to the U.S. Trade Representative endorsing the petition of the Semiconductor Industry Association.

It is my hope that prompt action on the section 301 petition, combined with strong expressions of concern in Congress, might help finally to achieve progress in bilateral trade discussions with Japan. I hope that the announcement yesterday upon examination will be important to those that came from Japan and I hope that they will be followed through by appropriate action within Japan and her trade relationships and her purchase practices in that country. If that is not the way it goes, I believe protectionist pressures will produce strong U.S. legislation before this year is over.

It is my hope that today's hearing can be part of a constructive effort to achieve progress on these issues. I am particularly pleased that Dr. Robert Noyce, who is chairman of the board of directors of the Intel Corp. of Santa Clara, CA, a constituent of mine and an oustanding leader of the industry, is to be on a panel that will speak to us later this morning. I welcome him at this point.

I thank you very much, Mr. Chairman.

[Senator Cranston's letters follow:]

ALAN CRANSTON
CALIFORNIA

United States Senate
WASHINGTON, DC 20510

July 9, 1985

His Excellency Nobuo Matsunaga
Ambassador Extraordinary and
  Plenipotentiary of Japan
Embassy of Japan
Washington, D.C. 20008

Dear Mr. Ambassador,

We are writing to convey to you our concerns regarding trade issues between the United States and Japan, specifically regarding the current problems with the semi-conductor industry.

First we want to reiterate our strong support for the efforts taken by Japan so far to open up its markets to international trade, and our support for strengthening and expanding trade relations with Japan. We must, however, also underscore our very deep concern that progress in opening Japanese markets must be more rapid and effective. Failure to make greater progress has led to a sense of deep frustration in the United States and has led to growing ill-will against Japan, especially among those in the trading and high technology communities where there have been thousands of layoffs in California, alone, in recent weeks.

Responsibility for the lack of progress lies with both Japan and the United States. In the United States, our main failure lies in our not reducing the federal deficit which has resulted in high interest rates and imbalance in the value of the dollar and the yen that makes our exports less competitive. Japan has been too slow in dismantling the structure of quotas and trade barriers that have closed out our competitive technology goods from the Japanese market. Japan has also been too slow in responding to U.S. proposals in government forums like the High Tech Working Group and MOSS (Market-Oriented Sector Selective) negotiations regarding greater market access for U.S. semiconductors in Japan. And Japan has been too tolerant of anti-trust and dumping violations perpetrated by Japan-based corporations, such as the Hitachi case.

The semiconductor industry is a clear example of an industry in which U.S. companies' access to the Japanese market has been severely limited while Japanese companies have had free access to the United States market. The relatively low sales of U.S. high technology goods in Japan is not a result of any greater competitiveness on the part of Japanese companies. U.S. semiconductor companies are clearly competitive with Japanese companies as evidenced by their relative levels of sales in markets outside of Japan.

The semiconductor industry in the United States and in Japan is facing a very difficult period. Demand has fallen in both countries. But it is unacceptable to the United States to have Japanese semiconductor products which are in excess "dumped" in the United States market. Such activities do further injury to the industry and to U.S.-Japanese trade relations at a time when it is vital to improve, not harm, our trade ties.

While the government of Japan has stated that it recognizes the need to make special efforts to overcome the barriers which have prevented U.S. semicondutor companies from participating fully in the Japanese market, the Japanese Government has failed to encourage increased purchases of foreign companies' semiconductors by Japanese firms. In fact, the U.S. share of the Japanese semiconductor market has actually declined during 1985 to levels of 10 years ago, when import quotas were in place.

We are strong advocates of an open international trading system. We must reiterate our concern that unless progress is achieved , the pressure in Congress to take protectionist action will continue to grow. We believe that the semiconductor case will be taken as a concrete example by Congress of Japan's determination to open its markets. A substantial increase in U.S.semiconductor companies' share of the Japanese market would demonstrate effectively that commitment. Failure to do so will force the Congress to question it.

We request that you convey our views on the matter of the semiconductor industry to the highest levels of your government. We look forward to working with you to resolve the trade dispute and enhance our close relationship with the people of Japan.

Sincerely,

Pete Wilson
Henry A. Waxman
Mel Levine
Julian Dixon
Tony Coelho
Matthew G. Martinez
Mervyn M. Dymally
Esteban E. Torres
Carlos J. Moorhead

Alan Cranston
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Robert K. Dornan

Al McCandless

George E. Brown Jr.

Augustus F. Hawkins

Julian Dixon

Jim Bates

United States Senate
WASHINGTON, D.C. 20510

ALAN CRANSTON
CALIFORNIA

June 14, 1985

Mr. Michael Smith
Acting U.S. Trade Representative
Office of the United States
  Trade Representative
600 17th Street, N.W.
Room 201
Washington, D.C. 20506

Dear Mr. Smith,

I am writing to express my strong support for the section 301 petition filed today by the Semiconductor Industry Association. I believe that swift and effective action is needed by our government to combat unfair Japanese trade practices that are harming our vital semiconductor industry.

I request that when this petition is considered in hearings, I be provided the opportunity to present testimony.

There is clear evidence that Japanese companies, while hiding behind a wall of barriers which protect their own domestic markets, are systematically 'dumping' semiconductors in the United States far below their own production costs. These predatory trade practices are unfair to American industry and to American workers. And they do grave injury to the effort to ensure a free and stable international trading environment.

I believe in the freest possible trade, but if it's not fair, it's not free. I oppose unnecessary Federal government intervention in our domestic industrial development. But our government cannot stand idly by when an industry at the vanguard of our future industrial growth -- the semiconductor industry -- is undermined by outrageously unfair foreign practices. Inaction in such a case amounts to unilateral disarmament in international trade competition.

I have asked industry leaders to meet with me in a series of meetings in my office this week. And I have sat down and discussed this issue with senior members of the Reagan Administration, including Secretary of Commerce Malcolm Baldridge. I am confident that with a continued concerted effort, we can mount an effective response from our government.

Thank you for your consideration of my views and I look forward to a favorable response to my request.

With best wishes,

Sincerely,

Alan Cranston

Alan Cranston

Senator **Proxmire**. Mr. Chairman, I'm going to have to leave shortly. I ask unanimous consent that I may submit questions to these witnesses and to the panel for their response in writing.

Senator **Heinz**. Without objection, so ordered.

Senator **Proxmire**. Thank you, Mr. Chairman.

Senator **Heinz**. We are privileged to have with us today Mr. James Murphy, who is Assistant United States Trade Representative, Bilateral Affairs with Japan and Europe, and Mr. Clyde Prestowitz, Counselor to the Secretary for Japan of the Department of Commerce.

Mr. Murphy, will you please proceed?

STATEMENT OF JAMES M. MURPHY, ASSISTANT UNITED STATES TRADE REPRESENTATIVE, BILATERAL AFFAIRS, JAPAN AND EUROPE, WASHINGTON, DC

Mr. **Murphy**. Thank you, Mr. Chairman. We welcome the opportunity to appear before you this morning to discuss our trade problems with Japan. I would like to present to you a brief summary and then submit a longer statement for the record.

Senator **Heinz**. Without objection, the entire statement will be part of the record.

PETITION FILED ON UNFAIR TRADE PRACTICES

Mr. **Murphy**. As you have indicated, Mr. Chairman, the Semiconductor Industry Association has filed with the Office of U.S. Trade Representative [USTR] a petition under section 301 of the Trade Act of 1974. Ambassador Yeutter accepted that petition on July 11 and in so doing said:

> The industry's petition raises serious questions about possible Japanese market barriers in microelectronics that deserve a thorough investigation.

Under the provisions of section 301, we have up to 1 year to investigate the allegations made in that petition. We hope it won't take us that long. And if unfair trade practices are the finding of that investigation, the USTR in consultation with the other agencies does have authority to recommend to the President that retaliatory action be taken if that is deemed appropriate. The final decision on that, of course, would be the President's.

The first step in the section 301 proceeding is for us to consult with the foreign government associated with the petition's allegations. We are beginning that process. My boss, Ambassador Smith, plans to launch those discussions within the next 3 weeks with the Japanese Government. We, of course, have had some informal discussions but the first formal meeting on the petition will probably occur in the next few weeks.

In preparation for those consultations, we are consulting closely with the semiconductor industry, the Semiconductor Industry Association, and industry experts.

As I think you are aware, Senator, we have recently completed a fairly extensive study of the semiconductor industry conducted by a private contractor. This was not done with any great foresight of the filing of the petition on our part, but rather was in compliance with a requirement from the Congress on the subject of targeting by a foreign government. That study was submitted to the Congress early in June and we believe this will be helpful to us in pursuing the allegations in the petition.

No statement I make this morning should be taken as a judgment on the merits of the petition. It would, of course, not be proper for us to make such statements with the formal petition before our office.

This semiconductor trade problem with Japan is not a new subject for us. Clyde and I have spent a good deal of time on this subject over the last 2 or 3 years. I would say we probably have spent no more time on any other industry's problems than the semiconductor industry's problems.

FOCUSED ON INDUSTRY'S PROBLEMS IN 1983

For a good part of 1983, in the United States-Japan high technology working group, we focused exclusively on the problems of the semiconductor industry. Those discussions led to the conclusion of an understanding between our two Governments. This was with close consultation with our industry and at the time I think it was the belief of the industry as well as those of us in the Government that the understanding between the two Governments could conveivably solve our problems. And for a couple of quarters it appeared that it was working. For the last part of 1983 and the beginning of 1984 we were achieving our objective of increasing United States market share in the Japanese semiconductor market.

This was a short-lived success. Following early 1984 our market share began to decline and has continued to do so since.

This has led the industry as well as us to conclude that quite obviously the solutions that we reached in the high technology work group were short-lived, were not a long-term solution, and we must look therefore to other solutions to the problem.

It had been our objective in those discussions to achieve two things. One was an increase in United States market share in Japan and the other was to achieve long-term supplier relationships of United States companies with Japanese users of semiconductors. As I mentioned, the first objective was achieved only for two quarters. With respect to the latter objective of long-term supplier relationships, we have reports from a few United States companies that were engaged in discussions and I believe did conclude a few such relationships or contracts with the Japanese users, but all too few. Many U.S. companies reported no such discussions or successful contracts. Therefore, it is our sense that very few, if any, U.S. companies succeeded in achieving these kind of relationships.

By long-term supplier relationships, we are not simply referring to a contract that spans a long period of time, but rather, a relationship in which a U.S. supplier is brought into the confidence of a manufacturer of final products in discussing that manufacturer's future plans for manufactured products and is asked to design and/or produce products for those final products. This sort of relationship is common in the United States but not common—indeed, fairly rare—in relationships between United States semiconductor makers and Japanese final products makers.

In our discussions with the Japanese on this second round, that again would be an objective of the industry's and of ours and we must seek a way to make that happen if we are going to find a long-term solution to this problem.

Let me if I may just briefly mention where we are in our current negotiations with the Japanese, particularly those talks which are ongoing as a result of the understanding between President Reagan and Prime Minister Nakasone in the January summit.

As you recall, there was an agreement between the two leaders that we would pursue intensively discussions in four sectors—telecommunications, electronics, forest products, and medical equipment and pharmaceuticals.

Just briefly touching on those four sectors, we have made the most progress in telecommunications. We spent most of the first part of the discussions in that group focused on the new Nippon Telegraph & Telephone Corp. [NTT] which would derive from the laws be implemented April 1 as well as the telecommunications business law also to be implemented April 1.

We focused our efforts on discussions with the Japanese concerning the ordinances and ministerial regulations which were used to implement those two new laws and I think the feeling was, as was reported to you by Mr. Olmer who led most of those discussions, we achieved some degree of success in the sense of removing barriers and removing impediments that would have appeared in the ordinances were it not for our rather intensive discussions with the Japanese Government.

MOVED INTO PHASE 2 OF THOSE DISCUSSIONS

We have now moved on to phase 2 of those discussions where we have taken up other issues, including communications satellites and problems related to the radio wave law which affect very much our ability to sell such things as mobile telephones.

A word on telecommunications satellites, it appears that we may have made some progress there in that the private market at least, though not the public procurement of telecommunications satellites, has been opened up. Two United States companies have formed joint ventures with other Japanese companies and have recently received licenses from the Minister of Post and Telecommunications to launch telecommunications satellites and provide related services. We are hopeful that those projects will in fact be successful and represent a new business entry for U.S. firms. Only time, of course, will tell.

In the electronics group, we have had some progress in such areas as copyright protection for software where some proposals of the Japanese Government which would have been seriously detrimental to our interest were dropped in favor of more favorable proposals by another Japanese ministry, and that appears to be developing positively. The law was passed. They are now in the stage of developing implementing regulations. We are consulting with them on those as they proceed.

Some progress as well in the area of new legislation by them for the protection of chip design as well as in the patent area.

The subject which has been most discussed in that group has again been semiconductors. We began those discussions earlier this year even prior to the decision of the SIA to file a petition. The subjects of greatest focus in those discussions have been the publicly announced plans of Japanese semiconductor makers to expand their capacity despite a declining market both in Japan as well as elsewhere, and the related concern that such overcapacity could lead to dumping of semiconductors in the United States as well as other markets.

Our industry was concerned about this. They had seen this cycle occur before when the market has been depressed—that is, overcapacity and the consequent dumping of products.

We have had some discussion with the Japanese on the question of their capacity expansion plans. We have tracked very closely the public announcement of Japanese companies with regard to their capacity expansion in the Japanese press and we have noted a declining trend of these statements in the press.

Having raised the issue in the electronics group, Ministry of International Trade and Industry [MITI] has done a survey of the major Japanese producers and reports to us that there will be a decline of some 20 percent of their expenditures for capacity in fiscal 1985 as compared to fiscal 1984. We have problems with reconciling those numbers presented to us by MITI with the ones that we see announced by the companies in the press. There are, of course, a number of possible explanations for that and we are discussing with the Japanese Government what the precise numbers might be. But we continue to express our very strong concern on that point.

POTENTIAL DUMPING FROM OVERCAPACITY

We have also discussed the issue of potential dumping in this market which would result from that overcapacity and in the last meeting of the electronics group in June it was agreed between the two sides that we would undertake the development of a conceptual model between us and the Japanese which could be used by the Japanese Government to further inform and hopefully deter their companies from dumping on the United States market. We take quite seriously those problems and we have taken them even more seriously with the coming to public attention of a proposed marketing strategy which I think you're probably aware of, which lent even further credence to the concerns of our industry and the Government about the potential dumping. We believe there is a developing sensitivity on the Japanese side that may hopefully deter dumping.

As you indicated, there is, of course, the filing of the dumping petition with the Commerce Department and we believe that these concerted efforts may yield some fruit.

In the medical equipment and pharmaceuticals groups we've made some progress. The focus has been primarily on regulatory issues, product approval problems that U.S. companies face in getting into that market. The progress is slow. It's painful. But we do seem to see some movement on the Japanese side to liberalize those rules.

We have further serious problems to get into, not the least of which is the Japanese Government's reimbursement system for providing medical services which has constituted barrier for some United States companies in that market.

In the forest products group, which embraces paper as well as wood products—all too often the reference is to wood and not to paper, but we have stressed that paper is included in that group. In this group we've made the least progress. As you are probably aware, the first meetings in February stalemated on the question of whether the wood products tariffs would be on the table for discussion. The Japanese took the position they should not and we took a position that all barriers must be on the table for discussion. We had no movement in that group until the April 9 announcement by the Japanese Government that they would embark on a 5-year revitalization program for their woods products industry and in the third year they would begin to positively consider a reduction in tariffs.

We have taken the position that their proposal is unacceptable to us. We did not embark on the market oriented sector-selective [MOSS] discussions to have in the first instance help for their industry and only 3 years later assist the U.S. industries in the form of greater access. We remain still at odds on that position, Mr. Chairman, and we have some way to go before we work that out.

On the paper side, we have had some minor progress. The June 25 announcement contained a 20-percent cut on some but not all paper items. Those cuts are delayed in their implementation and do not embrace all the products of interest to us.

Senator HEINZ. Mr. Murphy, maybe since the history of our negotiations with Japan are not only lengthy but as you've just described, go product by product by product infinitely, that perhaps we might be best advised for you to summarize what you have to say and let the members of the panel ask questions. You clearly have a great command of detail, but I think the committee is generally aware of the considerable even excessive amount of negotiations that have taken place between this country and Japan and your heroic efforts in that regard.

Mr. MURPHY. That did conclude my summary of the four groups, Mr. Chairman, and as the summary indicates, they are lengthy and painfully in detail. Perhaps I should conclude there then and take questions.

[Complete prepared statement follows:]

STATEMENT OF
JAMES M. MURPHY, JR.
ASSISTANT U.S. TRADE REPRESENTATIVE FOR BILATERAL AFFAIRS
BEFORE THE
SUBCOMMITTEE ON INTERNATIONAL FINANCE AND MONETARY POLICY
OF THE
SENATE BANKING COMMITTEE
JULY 30, 1985

Mr. Chairman:

It is a pleasure to be with you today to discuss the status of our trade negotiations with Japan. As you know, we in the Office of the United States Trade Representative welcome the attention which this Committee gives to our trade relationship with Japan. We share your conviction that access to Japan's markets must improve, and I welcome this opportunity to discuss with you the efforts ~~we have underway~~ to achieve this goal.

MOSS Negotiations

During the past six months, we have been engaged in intensive trade negotiations with the Japanese Government under the MOSS, or Market-Oriented Sector-Selective, approach. This approach was agreed upon by President Reagan and Prime Minister Nakasone during their summit meeting in Los Angeles on January 2. Four sectors were identified for negotiation, with the expectation that additional sectors would follow. These four are telecommunications, electronics, medical equipment and pharmaceuticals, and forest products, which includes both paper and solid wood products.

These negotiations are different from previous trade talks we have conducted with the Japanese in several respects. First, we intend to identify and remove all barriers to trade in each sector. But the removal of barriers is not enough. Our goal is a fundamental transformation in the degree of openness of the Japanese market. Furthermore, the success of the MOSS approach will be measured over time in two ways: (1) increased sales of American products in Japan, and (2) the perception by U.S. firms that they have unfettered access to the Japanese market.

Each negotiating team is being led by an Under Secretary or equivalent on the U.S. side and a Vice Minister on the Japanese side to ensure continuous high-level involvement. The President and the Secretary of State have oversight responsibility. In addition, Ambassador Yeutter and Secretaries Baldridge and Block have been following the progress of these negotiations closely. No final cut-off date has been set for these discussions, but the two Governments will soon jointly conduct a comprehensive sector-by-sector review and, based on this assessment, decide on future timetables.

I would like to review briefly for you each of the four MOSS sector negotiations.

Telecommunications

This team, co-chaired by Deputy United States Trade Representative Michael B. Smith and Under Secretary of Commerce Bruce Smart, has held six plenary sessions: once each in February, March, April, and May, and twice in June. In addition, several technical level bilateral meetings have been held. The frequency of these meetings has been due largely to the fact that Japan passed and is implementing this year new laws which affect significantly access to the telecommunications services and equipment markets. This intensive effort has paid off; we have achieved more progress in telecommunications than in any other MOSS sector. Significant barriers remain, however.

Phase I, which ended in April, dealt with issues associated with the change in status of Nippon Telegraph and Telephone Corporation (NTT) and the Telecommunications Business Law. Success was achieved in such areas as standards, certification, transparency, and registration requirements as they affect customer premise equipment. We are now in Phase II, which deals with radio telecommunications equipment. The issues are roughly comparable to those we encountered in dealing with terminal equipment in Phase I, but we find, to our frustration, that because of Japanese resistance we may have to repeat the same ground we so laboriously covered during Phase I. We intend in Phase III to deal with the broader structural and business environment that has kept competitive American products from penetrating the Japanese market.

Electronics

This sector, also co-chaired by Deputy United States Trade Representative Michael B. Smith and Under Secretary of Commerce Bruce Smart, has held four plenary sessions: in February, March, April, and June. We have seen some progress in certain areas of concern to the United States. More remains to be done, however, before barriers confronting U.S. manufacturers entering the Japanese market are eliminated.

Those areas in which progress has been made include copyright protection for computer software, semiconductor chip protection, and patent issues. We continue to follow closely developments in Japan's new high technology promotion laws for their potential trade-restrictive effects. We also continue to monitor the activities of the Semiconductor Manufacturing Equipment Council to ensure that it does not have a discriminatory effect on U.S. manufacturers. Areas still under active discussion between the United States and Japan include such issues as foreign exchange control, satellite procurement, and a cluster of problems related to semiconductors.

As you know, Mr. Chairman, United States Trade Representative Clayton Yeutter on July 11 accepted the Section 301 petition alleging unfair Japanese trade practices filed by the Semiconductor Industry Association.

Under the 301 requirements, the Governments should consult. These consultations are expected to commence shortly. There is a maximum of 12 months to complete the process, after which the USTR recommends options to the President, including retaliation if justified.

Medical Equipment and Pharmaceuticals

This team, chaired by Assistant Secretary of the Treasury David Mulford, has held three plenary sessions: in March, April, and June. As in the MOSS electronics negotiations, success has been attained in certain items of concern to the United States. Problems still remain, however, and must be dealt with in order to remove all barriers to market access.

At the first session, the United States raised eight long-standing regulatory issues considered to be "milestones" for progress under this MOSS. At the second session, the Japanese officials presented a position paper on the eight issues and agreed to draft, in consultation with the U.S. Government, public notices and ministerial ordinances in July for implementation in August. At the third session, we entered into discussion of six new issues and one fundamental question concerning the Japanese regulatory system's control over proprietary rights for medical devices and pharmaceuticals. Agreement in principle has been reached with the Japanese to schedule future MOSS plenary sessions on medical equipment and pharmaceuticals in August, October, and December, and to hold technical level bilateral meetings as needed.

Forest Products

This team, chaired by Under Secretary of Agriculture Daniel Amstutz, has held three plenary sessions: in February, May, and June. Several technical level bilateral talks have also been held. From the outset, forest products, which includes wood and paper products, has proved to be the most difficult of the four MOSS sectors. Although we have seen some movement forward since our first meeting in February, two major problems continue to stymie progress.

The first concerns the timing and depth of tariff cuts on wood and paper products. The Japanese participants in these MOSS talks have been unwilling or unable to go beyond Prime

Minister Nakasone's April 9 statement that the Japanese Government would "positively consider reduction of [wood] tariffs approximately from the third year," now understood to be 1987. On paper tariffs, although we recently requested that Japan match the zero tariff rates that the United States has, the unilateral June 25 tariff announcement by the Japanese Government included only a 20 percent cut. This issue will continue to be discussed in the MOSS talks. The second issue concerns Japan's intention, announced on April 9, to launch a five-year program to restructure the domestic forest products industry. We want to ensure that the GATT and OECD guidelines are followed, as well as the spirit of MOSS' market-oriented philosophy. The Japanese have agreed to do so.

In both wood and paper products, progress has been only incremental. We are, however, learning more about the structure and operation of the Japanese forest products industry with each new meeting, which is helpful in reaching our goal.

Other Outstanding Bilateral Issues

Although the MOSS approach initiated by President Reagan and Prime Minister Nakasone can be, and I expect will be, expanded to include other areas, it is not intended to substitute for all the other trade negotiations we are conducting with Japan.

We continue to negotiate with the Japanese to lower their tariffs on a wide range of industrial and agricultural products. We welcomed the tariff announcement of June 25 in which the Japanese Government stated its intention to eliminate tariffs on 37 items and reduce tariffs by about 20 percent on more than 1800 items. But we were, at the same time, disappointed that some of our priority items such as wood products, chocolate confectionery, and grapefruit were not included, and that tariff cuts on other items such as paper products and wine were much smaller than we had sought.

In services, we are conducting ongoing discussions with the Japanese Government on such issues as access by American lawyers to the Japanese legal market, access by U.S. shipping companies to the auto carrier and tobacco shipping business, and restrictions on the transport of maritime high cube containers.

Other outstandings bilateral issues include barriers to U.S. cigarette sales in Japan, the low level of NTT procurement of U.S. telecommunications equipment, negotiations yet to commence under the Wine Equity Act on Japan's trade regime affecting wine, governmental restrictions on certain marketing activities by U.S. companies in Japan, increasing the sale of U.S.-made automobile parts to Japanese car manufacturers, review of U.S. soda ash exports, and Japan's import quotas on leather and leather footwear.

As you can see, Mr. Chairman, our present trade dialogue with Japan spans nearly the whole spectrum of our trade relationship. The focus of that dialogue, including the high-level MOSS sectoral negotiations set in motion by the President and the Prime Minister, is market access. Our goal remains an across-the-board reduction in the barriers our exporters face in Japan so that the opportunities for U.S. companies to sell in Japan are comparable to those for Japanese companies operating in the United States.

Let me reiterate that this Administration remains unalterably opposed to the imposition of export restraints on the part of Japan. What we seek is not trade-restrictive steps, but rather trade-expansive measures, most notably the full opening of Japan's markets to foreign goods, services, and investment.

This kind of openly competitive environment would benefit consumers in both countries, and provide the stimulus needed by industries in both countries. This is, in fact, the only kind of environment that will ensure the stable, cooperative, and mutually productive trade relationship we seek with Japan.

Senator **Heinz**. All right. We're going to turn to Mr. Prestowitz first. I just want to make two announcements first. I'm sorry that in this high-tech age we're unable to get the microphones to work. I am advised that a fuse blew. We're not quite sure whether that was a Senate fuse or a House fuse or a White House fuse, probably a Senate fuse this morning.

I want to observe that Senator Dixon has been present for some time and I know he has a great interest in these matters. I also want to announce that I will be leaving very shortly, in about 3 minutes, for a meeting at the White House and Senator Gorton has graciously agreed to chair the hearing. I will return as soon as I can, but I do not know whether I will be back in time to conclude the hearing or not. I hope to be able to do so.

FLYER BY HITACHI

Before I turn to Mr. Prestowitz, I do want to make special note of what I would call exhibit A, smoking gun. This is a flyer put out by Hitachi which you alluded to, Mr. Murphy, in your conversation and discussion a moment ago. It has two interesting provisions. In one it says:

> Win with the 10 percent rule. Find your competition A and B and Intel products, quote 10 percent below their price. If they requote and reduce, go 10 percent again. Don't quit until you win.

Now, if that was just kind of a hortatory effort to the salesman to cut back his commission until he got nothing you might be able to say it's suspicious but it isn't on its face dumping or a clear violation of the trading law. But then there's a little interesting phrase at the bottom, "25 percent distribution margin guaranteed."

The question is, guaranteed by whom? Who is really behind this price cutting and guaranteeing of profit all the way down the line? Now can Hitachi do it all by themselves or do they have some help from the system in Japan?

Do you or Mr. Prestowitz want to just take a crack at that question.

Mr. **Prestowitz**. Hitachi is in a position to guarantee it, Senator. Hitachi is a very large company. Those kinds of sales campaigns are not forever and Hitachi has the resources to guarantee it and I think they do.

Senator **Heinz**. Can this be other than dumping?

Mr. **Prestowitz**. Well, since that—it may be that a case will be brought on that before the Commerce Department, I wouldn't want to be in a position of making a judgment, but it certainly is very suspicious.

Senator **Heinz**. Have you ever seen anything more suspicious?

Mr. **Prestowitz**. I've seen a lot of bad things, yes.

Senator **Heinz**. Have you ever seen anything this bad?

Mr. **Prestowitz**. Yes, I have.

Senator **Heinz**. Were any of them Japanese?

Mr. **Prestowitz**. As you know, an awful lot of the dumping petitions that come before the Commerce Department are Japanese companies.

Senator **Heinz**. I just want to observe before your testimony and my departure, Mr. Prestowitz, that it seems to me that we are going to be in an endless cycle of negotiations that simply result in a flurry of new practices regardless of what's agreed to and just so nobody is confused about the position that people like Senator Gorton and myself and Senator Danforth and others take, we have had 4½ years of promises from Japan only to have them in effect broken.

Senator Mattingly, before he left asked if a question would be asked and that is, do we need any more laws on the books in order to open up the market opportunities that we believe are appropriate with the international obligations of a developed country? You know, were Japan an undeveloped country, we might expect them to be engaged in penny ante protectionism. First, this isn't penny ante. This is grand larceny when it comes to protectionism. Second, it may come as a surprise to the leadership in that country and the bureaucrats, but Japan is no longer a developing nation. It is a great powerful prestigious nation and the time has come for it to start acting like one and assuming its international obligations.

Senator Mattingly's question was: Do we need any more laws in order to encourage, require, or force Japan to live up to its international obligations, at least as they affect the United States? Do you have an answer to that question?

QUESTION OF TARGETING

Mr. **Prestowitz**. Well, I think both the Commerce Department and USTR submitted a report to the Congress recently on the question of targeting and what should be done about it and I think in that report both of us concluded that at the moment there was no need for further legislation.

But to respond to your question more fully, I think the heart of the problem is: How do we handle it, what do we include under the rubric of targeting, and what are we dealing with, is a situation in which Japan—and not only Japan but other countries—have pursued industrial policies aimed at developing capability—even comparative advantage—in some particular industry. And looking at the semiconductor industry, the problem goes back to the early 1960's when the Japanese Government determined as a matter of policy that it was a crucial matter of national interest for Japan to develop a strong and competitive semiconductor industry. And in consequence of that decision, it executed a number of policies aimed at obtaining a strong industry.

So it protected the Japanese market. It prevented United States investment in Japan in the formative period of the market. It controlled the transfer of technology into and out of Japan and it engaged in a number of other practices which limited the ability of United States companies to fully exploit the comparative advantage they had at that time.

Now we objected to those practices and the market was liberalized finally after long negotiation in 1975. But to give you an example of the spirit in which that liberalization took place, I have in front of me a recommendation of the Japanese Industrial Structure Council saying——

Senator **Heinz**. Mr. Prestowitz, I'm going to have to leave but Senator Gorton will be chairing the hearing. I apologize that I must leave in the midst of your response. It's not my wish to do so, but circumstances beyond our control require it. Thank you very much and please proceed.

Senator GORTON. Please continue.

Mr. PRESTOWITZ. In this recommendation the Industrial Structure Council says:

> A keener competition is anticipated after a liberalization. As a result, the healthy development of the electronic industry of our country could be hampered. It is necessary to consolidate the system to properly keep hold of trends so that proper countermeasures can be taken when significant harm to the national industries are anticipated.

Well, this problem continued and finally in early 1981–82, as Jim noted, we began to negotiate in the high-tech working group.

Now at the moment I think you would be hard pressed to find in Japan any formal protectionism. There are no tariffs on semiconductors. There are no quotas. There is no restriction on investment and superficially to all intents and purposes, the market is open. But these earlier decisions that were taking place in the 1960's and 1970's have consequences. They build a structure and that structure has consequences for us today.

It's those consequences that our industry feels currently place them in a disadvantaged position and they have filed this section 301 petition. The question that we have to determine in the executive branch is whether or not the current law, section 301, deals with or should deal with the current effects of past practices.

Senator GORTON. Mr. Prestowitz, you had no opportunity to give your opening statement. If you would like to do so now or to summarize it——

Mr. PRESTOWITZ. I will spare you, Senator, if I can just submit it for the record.

Senator GORTON. Fine. It will be included in the record as if read in full.

[The complete prepared statement follows:]

STATEMENT OF CLYDE V. PRESTOWITZ, COUNSELOR TO THE SECRETARY OF COMMERCE FOR JAPAN AFFAIRS

MR. CHAIRMAN:

THANK YOU FOR THIS OPPORTUNITY TO DISCUSS WITH YOU AND YOUR COMMITTEE THE VARIOUS DOMESTIC AND INTERNATIONAL FACTORS THAT HAVE LED TO THE CURRENT CHALLENGE FACED BY THIS CRITICALLY IMPORTANT HIGH TECHNOLOGY INDUSTRY.

LET ME BEGIN BY SAYING A FEW WORDS ON THE IMPORTANCE OF SEMICONDUCTORS IN TODAY'S WORLD.

SEMICONDUCTORS: A CRITICAL ELEMENT IN THE MODERN WORLD

THE SMALL SIZE AND LOW POWER REQUIREMENTS OF SEMICONDUCTORS HAVE MADE POSSIBLE A VAST ARRAY OF NEW INDUSTRIAL AND CONSUMER PRODUCTS.

IN FACT, SEMICONDUCTORS HAVE BECOME THE ESSENTIAL BUILDING BLOCKS FOR NEARLY ALL TYPES OF ELECTRONIC EQUIPMENT, AND ARE A CRITICAL COMPONENT IN THE TECHNOLOGICAL PROGRESS OF THE WORLD'S INDUSTRIALIZED COUNTRIES. THIS IS PARTICULARLY TRUE OF THE INTEGRATED CIRCUIT, AN ADVANCED FORM OF SEMICONDUCTOR, THAT PLACES THOUSANDS OF TRANSISTORS ON A SMALL SILICON CHIP. VIRTUALLY ALL MAJOR DEVELOPED COUNTRIES HAVE RECOGNIZED THE IMPORTANCE OF THIS INDUSTRY TO THEIR FUTURE INDUSTRIAL DEVELOPMENT, AND HAVE TAKEN STEPS TO ESTABLISH THEIR OWN PRODUCTION CAPABILITY.

IN THE UNITED STATES THE SEMICONDUCTOR INDUSTRY HAS BEEN SHAPED BY THE UNIQUE NATURE OF OUR DOMESTIC MARKET. THE COMPUTER MARKET REPRESENTS MORE THAN ONE-THIRD OF END-USER DEMAND, WHILE TELECOMMUNICATIONS, INDUSTRIAL AND CONSUMER DEMANDS COMBINED ACCOUNT FOR SLIGHTLY MORE THAN HALF OF THE SEMICONDUCTOR MARKET. GOVERNMENT DEMAND MAKES UP ROUGHLY 10 PERCENT OF SEMICONDUCTOR END-USE.

FLUCTUATIONS IN DEMAND HAVE CAUSED A RECURRING PATTERN OF EXPANSION AND CONTRACTION IN PRODUCTION AND CAPACITY. THIS CYCLICAL BEHAVIOR IS DUE, AT LEAST IN PART, TO CUSTOMER REACTION CAUSED BY RAPID CHANGES IN PRICE AND PRODUCT INNOVATION. TECHNOLOGICAL ADVANCES, ESSENTIAL TO THIS INDUSTRY'S GROWTH, STIMULATE THIS REACTION. THE OBSOLESCENCE OF OLDER DEVICES, BROUGHT ABOUT BY CONTINUOUS INNOVATION, CAUSES DEMAND TO SHIFT RELENTLESSLY TO NEWER DEVICES.

U.S. SEMICONDUCTOR INDUSTRY: DRIVEN BY COMPETITION

THE U.S. SEMICONDUCTOR INDUSTRY IS CHARACTERIZED BY INTENSE COMPETITION BETWEEN DOMESTIC COMPANIES AS WELL AS WITH JAPANESE AND EUROPEAN FIRMS. THIS COMPETITION HAS STIMULATED THE CONTINUOUS SEARCH FOR NEW DEVICES, REDUCED PRODUCTION COSTS, AND PRODUCED AN EVER EXPANDING MARKET. IN ADDITION IT HAS CAUSED THE "INTERNATIONALIZATION" OF THE SEMICONDUCTOR INDUSTRY.

DEVELOPMENT OF NEW PRODUCTS REQUIRES CONTINUOUS HEAVY INVESTMENT IN RESEARCH AND DEVELOPMENT. TO DATE, U.S. FIRMS HAVE SUCCESSFULLY GENERATED THE NECESSARY R&D FUNDS TO MAINTAIN THEIR WORLD LEADERSHIP POSITION. VIRTUALLY ALL TECHNOLOGICAL ADVANCES HAVE ORIGINATED WITH U.S. PRODUCERS. ONE OF THE MOST IMPORTANT EXAMPLES WAS THE DEVELOPMENT OF THE MICROPROCESSOR IN 1971. BEGINNING WITH A 4-BIT LOGIC DEVICE USED IN HANDHELD CALCULATORS, THE MICROPROCESSOR HAS EVOLVED INTO THE 32-BIT VERSION NOW USED IN STATE-OF-THE ART MICROCOMPUTERS. UNLIKE THE 64K AND 256K RANDOM ACCESS MEMORY (RAM), IN WHICH THE JAPANESE POSE A MAJOR COMPETITIVE THREAT, THE U.S. HOLDS THE TECHNOLOGICAL LEAD IN MICROPROCESSORS.

ANOTHER KEY ELEMENT OF COMPETITIVE SUCCESS, PARTICULARLY FOR SEMICONDUCTORS, IS THE REDUCTION OF UNIT PRODUCTION COSTS. U.S. FIRMS ATTEMPT TO DO THIS TWO WAYS: FIRST, BY BUILDING LARGE, INTEGRATED PRODUCTION FACILITIES IN ORDER TO MAXIMIZE ECONOMIES OF SCALE; SECONDLY, BY LONG PRODUCTION RUNS WHICH ACHIEVE "LEARNING ECONOMIES," RESULTING IN HIGHER YIELDS AND LOWER UNIT COSTS.

THE SAME QUEST FOR LOWER PRODUCTION COSTS IMPELLED U.S. CHIPMAKERS INTO THE INTERNATIONAL MARKET IN SEARCH OF OUTLETS FOR THEIR EXPORTS. IN PARTICULAR, AS THE PRODUCTION OF CONSUMER ELECTRONIC GOODS SHIFTED TO JAPAN AND THE NEWLY

INDUSTRIALIZED COUNTRIES OF SOUTHEAST ASIA. U.S. FIRMS RECOGNIZED THAT BY INCREASING THEIR VOLUME OF EXPORTS TO SUCH MARKETS, THEY WOULD HELP MAINTAIN THEIR COMPETITIVE EDGE AT HOME AS WELL AS ABROAD.

DRIVEN BY THE NEED TO COMPETE, U.S. FIRMS HAVE ADOPTED AN INCREASINGLY INTERNATIONAL ORIENTATION. THEY HAVE OPENED PRODUCT DESIGN AND DEVELOPMENT CENTERS IN EUROPE AND JAPAN IN ORDER TO TAP FOREIGN ENGINEERING TALENT. TO LOWER PRODUCTION COSTS, AMERICAN FIRMS SHIP PARTLY PROCESSED SEMICONDUCTOR PARTS FROM THE UNITED STATES TO LESS DEVELOPED COUNTRIES, HAVING LOWER WAGE RATES, FOR FINAL ASSEMBLY. DATA FOR 1984 SHOW THAT MORE THAN $3 BILLION IN VALUE WAS ADDED TO AMERICAN DEVICES PASSING THROUGH THESE SITES, EITHER TO RETURN TO THE UNITED STATES OR TO MOVE ON FOR SALE IN THIRD COUNTRIES. IN 1984 THE UNITED STATES FACED A TRADE DEFICIT OF $1.2 BILLION WITH THESE COUNTRIES, DUE PRIMARILY TO A 34 PERCENT INCREASE IN U.S. IMPORTS. FINALLY, TO IMPROVE MARKET ACCESS IN JAPAN AND IN EUROPE, U.S. CHIPMAKERS HAVE ESTABLISHED IN THESE COUNTRIES NOT ONLY ASSEMBLY OPERATIONS BUT ALSO THE MORE SOPHISTICATED WAFER PROCESSING FACILITIES. IN 1984, THE VALUE OF PRODUCTION FROM THESE PLANTS AMOUNTED TO ALMOST $2.5 BILLION. IN THE CASE OF EUROPE THE U.S. HAS BEEN ABLE TO MAINTAIN A TRADE SURPLUS OF BETWEEN $300 AND $400 MILLION ANNUALLY. HOWEVER, IN THE CASE OF JAPAN WE HAVE FACED AN EVER INCREASING DEFICIT.

DETERIORATING DOMESTIC AND FOREIGN MARKET POSITION

DESPITE THE STEPS TAKEN BY U.S. FIRMS TO ADAPT TO THE COMPETITIVE INTERNATIONAL ENVIRONMENT, THE U.S. SEMICONDUCTOR INDUSTRY IN 1985 FINDS ITSELF BELEAGUERED BY FOREIGN COMPETITION. U.S. SEMICONDUCTOR PRODUCTION IS EXPECTED TO DECLINE THIS YEAR, FALLING TO $16.0 BILLION FROM THE $17.7 BILLION SHIPPED LAST YEAR. EMPLOYMENT IS ALSO EXPECTED TO DECLINE. A WALL STREET JOURNAL ARTICLE OF JULY 24, 1985 REPORTED THE LOSS OF 3,600 JOBS IN SILICON VALLEY ALONE SINCE THE BEGINNING OF THE YEAR.

THIS DECREASE IN PRODUCTION AND EMPLOYMENT IS DUE IN LARGE PART TO THE SOFTENING OF THE COMPUTER MARKET, THE SEMICONDUCTOR INDUSTRY'S LARGEST SINGLE END-USER, AND RISING IMPORTS. COMPOUNDING THE DOMESTIC PROBLEM IS THE SERIOUS DETERIORATION IN SEMICONDUCTOR TRADE. A LONG STANDING MULTILATERAL TRADE SURPLUS TURNED TO A DEFICIT IN 1982. BY YEAR-END 1984 THE FIGURES SHOWED AN OVERALL SHORTFALL OF OVER $2.3 BILLION. THE PRIMARY REASON BEHIND THE CURRENT IMBALANCE IS A CONTINUING SURGE OF SEMICONDUCTOR IMPORTS FROM JAPAN. IN 1984, IMPORTS FROM JAPAN REACHED $2 BILLION, MORE THAN TWICE THE LEVEL OF THE PREVIOUS YEAR.

THE DRAMATIC SHIFT IN THE TRADE BALANCE IS DUE ALMOST ENTIRELY TO SLOW GROWTH IN U.S. EXPORTS OF COMPLETED DEVICES AND AN

INCREASE IN IMPORTS OF FOREIGN-OWNED DEVICES. IMPORTS OF THIS TYPE HAVE GROWN AT ALMOST 50 PERCENT PER YEAR SINCE 1978 WHILE EXPORTS HAVE EXPANDED AT A RATE OF ONLY 17 PERCENT PER YEAR. MOST OF THIS INFLUX IS TRACEABLE DIRECTLY TO JAPAN.

CURRENT TRADE INVESTIGATIONS: ECONOMIC SIGNIFICANCE

I WILL NOT COMMENT ON THE MERITS OF EITHER THE SECTION 301 PETITION FILED BY THE SEMICONDUCTOR INDUSTRY ASSOCIATION OR UPON THE DUMPING PETITION RECENTLY FILED BY MICRON TECHNOLOGY BECAUSE, IN THE LATTER CASE, COMMERCE'S INVESTIGATION HAS JUST BEGUN.

THE U.S. SEMICONDUCTOR INDUSTRY HAS THE LEGAL RIGHT TO SEEK TRADE ACT RELIEF FROM THE ALLEGED UNFAIR MARKET PRACTICES AND UNFAIR PRICE COMPETITION. THE JAPANESE ACTIONS TO RESTRICT U.S. ACCESS TO ITS DOMESTIC SEMICONDUCTOR MARKET, ACCORDING TO THE SIA PETITION, HAVE SERIOUSLY AND UNFAIRLY UNDERMINED AMERICAN SALES EFFORTS IN JAPAN. SIMILARLY, IF ALLEGATIONS OF ARTIFICIALLY LOW PRICES FOR JAPANESE MEMORY DEVICES PROVE TO BE VALID, THIS DUMPING REPRESENTS AN UNFAIR CHALLENGE TO THE ABILITY OF AMERICAN COMPANIES TO SELL IN THEIR HOME MARKET.

MARKET ACCESS IN JAPAN

AT ISSUE IN THESE PETITIONS IS WHETHER JAPAN AND ITS SEMICONDUCTOR FIRMS ARE PLAYING FAIRLY, BY THE RULES OF THE WORLD TRADING SYSTEM, IN THIS INDUSTRY. WITHOUT COMMENTING ON THE SPECIFICS OF THE CASES, I WOULD LIKE TO PROVIDE SOME FACTUAL BACKGROUND ON THE HISTORY AND DEVELOPMENT OF THE JAPANESE SEMICONDUCTOR INDUSTRY.

SINCE 1980, THE JAPANESE SHARE OF THE WORLD SEMICONDUCTOR MARKET HAS INCREASED BY ABOUT 25 PERCENT TO 27.5 PERCENT, LARGELY AT THE EXPENSE OF THE MARKET SHARE OF U.S. FIRMS. DURING THAT SAME PERIOD, THE PENETRATION RATIO OF JAPANESE IMPORTS IN THE U.S. MARKET HAS TRIPLED, AND OUR BILATERAL TRADE DEFICIT WITH JAPAN IN SEMICONDUCTORS HAS INCREASED NEARLY EIGHT TIMES TO OVER $1.5 BILLION. AT THE SAME TIME, THE IMPORT PENETRATION RATIO OF OUR FIRMS IN THE JAPANESE MARKET HAS ACTUALLY DECLINED, AND OUR TOTAL SHARE OF THE JAPANESE MARKET CONTINUES TO STAGNATE AT NEAR 10 PERCENT, AS IT HAS OVER THE PAST 10 YEARS.

THESE DEVELOPMENTS HAVE TAKEN PLACE AGAINST THE BACKDROP OF A JOINT EFFORT BY THE JAPANESE GOVERNMENT AND INDUSTRY FROM THE LATE 1960'S UNTIL 1976. KEY ASPECTS OF JAPAN'S EFFORT WERE:

-HOME MARKET PROTECTION, WHICH INCLUDED HIGH TARIFFS, QUOTAS, AND RESTRICTIONS ON U.S. INVESTMENT, AND LASTED UNTIL 1976; AND

-SUBSTANTIAL FINANCIAL SUPPORT FOR COOPERATIVE R&D WHICH IN TURN MADE IT POSSIBLE FOR THE JAPANESE SEMICONDUCTOR COMPANIES TO ACCELERATE THE INTRODUCTION OF NEW PRODUCTS ON WORLD MARKETS.

ALTOGETHER, THE JAPANESE GOVERNMENT FUNDED OVER 60 DIFFERENT PROJECTS. THE VLSI PROJECT ALONE, OUT OF WHICH DEVELOPED OVER 1000 PATENTS AND WHICH WAS ONE OF THE MAIN PROGRAMS, WAS BUDGETED FOR $132.3 MILLION BETWEEN 1976-79.

WHILE MOST OF THE PROTECTIONIST ASPECTS OF THE PROGRAM HAD BEEN ELIMINATED BY 1976, THE "THIRD EXTRAORDINARY MEASURES LAW FOR PROMOTION OF SPECIFIC ELECTRONIC AND MACHINERY INDUSTRIES," THE SO-CALLED KIJOHO, CONTINUED IN EFFECT UNTIL THE END OF JUNE OF THIS YEAR. IT PROVIDED, AMONG OTHER THINGS, FOR ANTITRUST EXEMPTION, PERMITTING MITI TO CONTINUE TO ENCOURAGE COOPERATION AMONG THE BIG SIX JAPANESE SEMICONDUCTOR FIRMS ON JOINT R & D PROJECTS, PRODUCT SPECIALIZATION AND PRODUCT ALLOCATION.

Whether or not these efforts were the cause, Japan's success in the semiconductor industry is suggested by the following statistics:

-In 1968, the industry was almost completely dominated by production for consumer electronic products. Sophisticated integrated circuit (IC) production had reached only $24 million out of a total yearly semiconductor production of $252 million, and a total component production of $1.4 billion.

-By 1978, sophisticated, international, state-of-the-art IC production for computer and telecommunications equipment had reached $1.2 billion out of $2.4 billion total semiconductor production and total component production of $8.75 billion.

Government Efforts

This is not the first time there have been trade frictions over semiconductors. As a result of earlier problems, the High Tech Work Group was establised in 1981. In that forum, we discussed with our Japanese industry and government counterparts the full range of issues affecting bilateral trade in this industry. The Working Group eventually adopted a series of joint

RECOMMENDATIONS WITH RESPECT TO SEMICONDUCTOR TRADE BETWEEN THE TWO COUNTRIES. THESE RECOMMENDATIONS WERE SUBSEQUENTLY ENDORSED BY THE JAPANESE GOVERNMENT AND THE U.S. CABINET IN LATE 1983. THE RECOMMENDATIONS PROVIDED THAT BOTH GOVERNMENTS SHOULD WORK TO ELIMINATE BARRIERS TO MARKET ACCESS IN HIGH TECHNOLOGY. SPECIFICALLY, THE TWO SIDES AGREED:

-TO MUTUALLY ELIMINATE THEIR TARIFFS ON SEMICONDUCTORS;
-TO PROVIDE PROTECTION AGAINST THE COPYING OF CHIPS; AND,
-TO ESTABLISH A JOINT DATA COLLECTION SYSTEM TO MONITOR TRENDS IN THE INDUSTRY IN ORDER TO PREVENT UNNECESSARY FRICTION AND MISUNDERSTANDING.

MOST IMPORTANTLY, THE JAPANESE GOVERNMENT UNDERTOOK TO PROMOTE THE IMPORTS OF U.S.-BASED SEMICONDUCTOR PRODUCTS, AND MITI IN FACT CALLED IN THE LEADING JAPANESE SEMICONDUCTOR CONSUMERS TO ENCOURAGE THEM TO DEVELOP LONG-TERM SUPPLIER RELATIONSHIPS WITH U.S. FIRMS. WHILE THERE WAS SOME INITIAL APPARENT SUCCESS IN LATE 1983 AND EARLY 1984 AS WORLD WIDE SEMICONDUCTOR SALES BOOMED AND SHORTAGES DEVELOPED, THIS HAS APPEARED TO FADE AS THE MARKET HAS CONTRACTED.

THAT CONCLUDES MY PREPARED REMARKS.

Senator **Gorton**. I'd like to ask either of you to comment on this question which really follows up on your last answer.

Could either of you—but Mr. Murphy you try it first—tell me of an unqualified success in negotiating with the Government of Japan over trade restrictions in a particular line, like semiconductors, forest products or the like, and not a success from the point of view simply that formal restrictions have been lifted but a success from the point of view that the markets for American products of that particular line after the negotiations were completed have substantially and sharply increased?

LACK OF UNITED STATES SALES IN JAPAN

Mr. **Murphy**. I think your question, Senator, as do your comments in your opening statement, go to the heart of our frustrations. We can point to many successes where we have eliminated barriers. The five Japanese packages contained removal of barrier after barrier. The problem and the frustration comes in translating the removal of barriers to sales.

I think you are quite correct. This all too often does not happen. Most of the time it does not happen. As for identifying situations where it has happened, I think the example I referred to earlier about telecommunications satellites may offer such an example.

I believe it was in about September 1983, when we first discovered that the market for telecommunications satellites in Japan was absolutely closed, both in terms of procurement by Japanese Government agencies as well as the opportunity to privately launch and provide telecommunications satellite services.

After about 1½ years of sometimes rather unpleasant exchanges on the subject, the Japanese Government did agree to open up at least the private procurement of satellites and the offering of services. They have continued to refuse to open up public procurement. So that a Japanese Government entity that may wish to use a satellite must use a Japanese satellite and Japanese launch services and is not able to buy a United States or foreign satellite.

But as I mentioned, so far two United States companies have entered into joint ventures with Japanese companies, have received in early June, I believe—very recently—licenses from MPT to launch such satellites and provide telecommunications services. Other U.S. companies are interested and I think are seriously looking at the market opportunities.

So we have what may be a developing success here. We are not prepared to declare it a final success because the satellites aren't up and the services have not been sold. But those companies do report to us that their advance selling of those services is proceeding very well and while there are difficulties as you proceed under any new undertaking they do not report at this time that they feel the problems are insurmountable or that the Japanese are being difficult. But they think things are proceeding and at this point they are optimistic. So we may have a developing success story in that sector.

Senator **Gorton**. Is that an exhaustive answer to my question? Is that the only one?

Mr. **Prestowitz**. There are a couple of others, Senator. Jim mentioned telecommunications. Earlier in the year Japan had legislation which would have limited American investment in value-added networks to 20 percent. Through negotiation that was removed and there are about three or four United States companies now which are setting up value-added networks in Japan.

Several years ago we complained about soda ash. There was a cartel in Japan. The Japanese FTC investigated it and indeed determined there was a cartel and issued a cease and desist order and United States exports have increased from about 50,000 tons to about 300,000 tons.

But those are the exceptions. The rule is as you say.

DEAL ON A BOTTOM LINE BASIS

Senator **Gorton**. Would either of you as a result of these experiences—and both of you are obviously very experienced in this field—advise that the United States might be much better off in dealing perhaps to a considerably greater degree exclusively with Japan on a bottom line basis, simply abandoning the method of approach which you have described with dealing with them item by item, and simply stating to the Japanese that there will be certain rather adverse consequences to their trade with the United States unless their purchases from the United States either increase or exceed a certain dollar value or demonstrate an upward direction and leave it entirely up to them and their market to decide what they wish to purchase from us?

Mr. **Murphy**. I suspect we both have days of frustration when we are tempted in that direction, Senator, but I don't think we are at that point yet. I think there are at least a couple of obvious dangers in that approach.

One danger is that such an approach puts you on the slope of totally managed trade between the two countries and it is certainly not the desire of this administration to move in that direction. It is still our hope that we will succeed in opening the Japanese market to at least the extent that we can continue in that line. But the problem of dealing with it in bottom line terms and leaving it up to the Japanese is that it puts you at their mercy in terms of which industries they choose to permit imports.

There have been examples in the past where we have taken that approach to a certain extent. We criticized Japan on its current account and trade balance and asked them to fix their gross numbers. Their response to that has been to do so in ways that would not be to our choosing. For example, the forward-buy of raw materials, stockpile of raw materials. Another example is to take a Boeing 747 purchase by another country and offer below-market financing so that the export will show up on the trade accounts of Japan rather than on the trade account of Indonesia, for example.

Senator **Gorton**. Of course, the former may be a problem. One presumes that we can count on defining exports in such a way as not to count the latter example.

Mr. **Murphy**. They can play numbers games and we can try to respond, but my observation is that they have such great interest in particular industries—I think the one before us today, semiconductors is a good example, where I think we would not be satisfied if Japan fixed, let us say, the overall trade volume but continued its current pattern in semiconductors. Certainly our industry wouldn't and I don't think we would be comfortable as a country with that process.

So I'm not sure I see a way of entirely avoiding focusing on industries as such.

Mr. PRESTOWITZ. I think it's important to add, though, that in our negotiations, particularly in these four sectors that Jim mentioned, we have told the Japanese that our measure of success is ringing cash registers. It's a new element in our discussions and I think it represents a result of some of the frustrations that Jim mentioned. We do get very upset that we talk and talk and talk and we presumably get results, but the results tend to be in the form of changing form rather than substantive changes. So we are not at the point of setting targets, but we have told the Japanese that we will measure the success of the action program and all the other programs by whether or not our share of the Japanese market increases.

Senator GORTON. Thank you.

Senator Dixon.

Senator DIXON. Mr. Chairman, I have no questions but I'd ask leave to place a statement in the record.

Senator GORTON. Senator Dixon's statement will be included in the record with the balance of the opening statements.

STATEMENT OF SENATOR ALAN DIXON

Senator DIXON. Mr. Chairman, let me begin by congratulating you for calling this hearing. A strong, healthy trade sector is essential to our overall economic strength. I believe the current slowdown in economic growth is due in small part to our appalling and rapidly increasing trade deficits. The aim of our trade policy should be a strong American export sector. Instead, the only thing we seem to be exporting is American jobs.

The too-strong dollar is the cause of a major part of our trade problems, but as the section 301 petition filed by the American semiconductor industry demonstrates, the dollar imbalance is not the only problem facing our exporters. The petition makes a strong case that the Japanese Government has taken a variety of actions to create a market structure in the semiconductor area that makes it more difficult for United States firms to penetrate that market. These actions range from Government promotion of the electronics industry, to antitrust exemptions and Government encouragement of the establishment of an electronic cartel, and to creation of a high-tech trust fund to provide subsidized loans for semiconductor R&D.

I think the evidence demonstrates clearly that American semiconductor products are competitive in the international marketplace and that United States businesses have made substantial efforts to improve their position in the Japanese marketplace. American firms, however, have been unable to improve their market share in Japan, even though Japanese penetration of the American market is increasing rapidly.

I am generally a supporter of free trade. I am reluctant to act to restrict access by foreign firms to the American market. But I am about at the limits of my patience. The U.S. market cannot and should not be the only place in the world where free trade is practiced. Competition and competitive pressure cannot work where foreign governments through subsidizing and otherwise assisting their companies and through limiting access to their markets prevent it from working. Trade is a two-way street. If U.S. firms do not get a fair opportunity to compete in foreign markets, how can they be expected to compete successfully against often subsidized foreign competition in the American market.

We can no longer tolerate business as usual. U.S. trade policy must become much more aggressive if we are to prevent preventionism overseas from overwhelming our domestic economy. Today's hearing provides a textbook example of the extent of our trade problems and of the problems caused by our failure to act to curb unfair trade practices abroad. I look forward to the testimony from the distinguished witnesses before the committee today and to working with them toward improving our trade policy. We need to act carefully, but we cannot afford not to act.

Senator **Gorton**. Senator Hecht.

Senator **Hecht**. Thank you, Mr. Chairman.

My question is not going to be on the semiconductor issue but it's something very relative to this which I would like to ask which has great relevance to our State.

Nevada is not exactly the Silicon Valley, but we do raise a lot of beef and consistently the ranchers in Nevada ask me, "Why can't we sell our beef to Japan?"

Could any of you comment on that?

QUOTA ON BEEF

Mr. **Prestowitz**. Well, you do sell some beef to Japan, but Japan has, as you know, a quota on beef and we sell a substantial amount of beef but we sell it within that quota. And since there's a quota, we can't exceed it.

Senator **Hecht**. Let's talk about the quota. Why is the artificial quota being set?

Mr. **Prestowitz**. They are protecting their cattle raisers.

Senator **Hecht**. Anything further you could add to it that I could tell my ranchers next week when I tour my State?

Mr. **Prestowitz**. It's been a bone of contention for a long time, Senator. We have opposed this quota in Japan for 20 years. It's illegal under the GATT. We had a very difficult year of negotiations last year in which Ambassador Brock finally concluded an arrangement which expanded the quota. It's not an ideal solution from our point of view, but at the end of a long period of negotiations last year we did achieve some success in expanding the quota and increasing the amount of beef United States cattle ranchers can ship to Japan. And it has, at least temporarily not been as big an issue in our discussions as it was last year. I'm sure it will come back because the quota is objectionable and we continue to oppose it.

Mr. MURPHY. We have told the Japanese—in fact, in the negotiations that Clyde refers to last year, it was an objective of ours to get the Japanese to agree to eliminate that quota at some time certain in the future. They refused to do so indicating that for political reasons they could not make such a commitment. This was a point of very strong exchange between us and we indicated that until they did commit to end that quota the beef problem, as well as the citrus problem which is a similar problem, would continue to be a thorn in the side of our relations and that is where the issue remains. As Clyde says, we negotiated last year an agreement in close consultation with our industry. I think it's a 4-year agreement. And at the end of that period of time we will be back very deeply into this whole issue once again.

Senator HECHT. You mentioned it's not quite the problem it was. What can I do to make that a bigger problem?

Mr. PRESTOWITZ. I'm not sure I should encourage you. We already have enough on our plate. But it remains a major concern of ours and we will continue to address it, along with all of the other problems. The number of issues with Japan has just exploded and this subject of semiconductors is a good example of how the last year beef was on the front burner and now semiconductors has come to the fore and issues tend to come up and then we deal with them and new issues arise, but they always come back. So I have no doubt that the beef problem will be on the front burner again very shortly.

Senator HECHT. What hope can I give the ranchers? Is there anything on the horizon that sees a dropping of these restrictions?

Mr. PRESTOWITZ. Well, it depends on how long the horizon is I think.

Senator HECHT. Give me your timeframe.

Mr. PRESTOWITZ. To be quite honest, it's certainly not within the next year. Beyond that, I'm not an expert.

Mr. MURPHY. I think over the longer term and we're talking of years here, clearly the trend has been toward expanding that quota. Clearly, our position is to end that quota because it is not consistent with Japan's GATT obligations. I'm sure that will continue to be the position of the Government. So that one can look forward to increased expansion of that quota, but when we will see its end, I don't think any of us can say.

Senator HECHT. So you're really not giving me much hope for the next year or two for the ranchers?

Mr. MURPHY. I don't think we could—the agreement we negotiated last year is a 4-year agreement and until that agreement has expired, absent the Japanese doing something to abrogate the agreement or be in violation of it, I doubt that the issue would be reopened.

Senator HECHT. I don't have all the facts on the agreement. Percentagewise, how much did you increase the quota?

Mr. MURPHY. I don't have that number off the top of my head, sir. We can certainly provide it to you.

Senator HECHT. If possible, give me a synopsis of that relationship to beef and trace the history for me so that I would have more facts on that when I get out to Nevada?

Mr. Murphy. Yes, sir. We will certainly provide that.

Senator Hecht. Provide it to my office so we'll have it.

Mr. Murphy. We will be happy to do that, Senator.

Senator Hecht. Thank you very much.

[The following information was subsequently supplied for the record:]

1

OFFICE OF THE
UNITED STATES TRADE REPRESENTATIVE
EXECUTIVE OFFICE OF THE PRESIDENT
WASHINGTON, D.C. 20506

August 2, 1985

The Honorable Chic Hecht
United States Senate
Washington, D.C. 20510

Dear Senator Hecht:

I'm writing to provide information on the U.S.-Japanese Understanding on Beef and Citrus which you asked Jim Murphy for during hearings held on July 30 by the Senate Banking Committee's Subcommittee on International Financial and Monetary Policy.

On August 14, 1984, then-USTR Brock exchanged letters with the Japanese Ambassador to the United States regarding Japanese actions to increase imports of beef and citrus from April 1984 through March 31, 1988. The U.S. negotiators stated that they viewed these to be interim measures after which the Government of Japan would make their policies and programs consistent with their international obligations under the General Agreement on Tariffs and Trade.

Specifically, Japan agreed to increase high-quality beef imports by 6,900 metric tons each year so that over the four years, imports should increase by 69,000 metric tons on a cumulative basis above the 1983 quota level. This annual increase is double the rate negotiated for 1980-1983. Actual levels of high-quality beef imports are to increase from 37,700 metric tons in Japanese Fiscal Year (JFY) 1984 to at least 58,400 metric tons in JFY 1987. The Japanese also increased the annual hotel quota for beef from 3,000 metric tons to 4,000 metric tons. A new system was implemented to allow direct negotiation of price, quantity, and cut between exporters and Japanese importers for ten percent of the import quota allocated to the quasi-Government organization that controls beef imports.

The understanding also calls for the orange quota to increase by 11,000 metric tons per year as compared to 4,500 to 5,000 metric tons per year between 1980 and 1983. The JFY 1984 quota was 93,000 metric tons and will increase to 126,000 metric tons in JFY 1987. Orange juice import quotas will continue to increase by 500 metric tons per year from a JFY 1984 quota level of 7000 metric tons. Another change is that only half rather than all imported orange juice is required to be blended prior to sale with Japanese orange juice in a mixture of 90 percent Japanese juice/10 percent imported juice. The other half may be sold in as little as a 50/50 blend. Finally, import quotas on grapefruit juice will be eliminated on April 1, 1986. Until that time, import licenses will be issued in an amount reflective of demand.

Since the August 14, 1984, exchange of letters, we have been working with the U.S. industry and Japanese Government officials to be sure that the understanding is implemented in a way that fully benefits American interests.

I have enclosed a copy of the understanding and the press statements made in August, 1984. If you have any additional questions, please call me at 395-6127.

Sincerely,

K. Suzanne Early
Deputy Assistant U.S. Trade
Representative for Agricultural
Affairs and Commodity Policy

Enclosure

EMBASSY OF JAPAN
WASHINGTON, D. C.

August 14, 1984

The Honorable William E. Brock
United States Trade Representative
Office of the U.S. Trade Representative
600 17th Street, N.W.
Washington, D.C. 20506

Sir:

I have the honor to refer to the recent consultations held between the Government of Japan and the United States Government in accordance with the notification of July 30, 1979 and to inform you, on behalf of the Government of Japan, that it intends to implement certain measures concerning imports of fresh oranges, orange juice, grapefruit juice, and beef as indicated in the Annex hereto, in accordance with the relevant laws and regulations in force in Japan.

Accept, Sir, the renewed assurances of my highest consideration.

Yoshio Okawara

Yoshio Okawara
Ambassador of Japan

EMBASSY OF JAPAN
WASHINGTON, D. C.

ANNEX

I. Fresh Oranges and Orange Juice

(1) Fresh Oranges

(a) The Government of Japan will increase its import quotas on fresh oranges in accordance with the following schedule:

	(metric tons)
JFY 1984	93,000
JFY 1985	104,000
JFY 1986	115,000
JFY 1987	126,000

For these purposes, "fresh oranges" means oranges and tangerines classified under headings Nos 08.02 and 08.11 of the Japanese customs tariff schedules.

(b) The Government of Japan will allocate the increment in import quota over the JFY 1983 level between the annual quota and the off-season quota, taking into consideration the supply and demand situation in both countries.

(2) Orange Juice

The Government of Japan will increase its import quotas on orange juice in accordance with the following schedule:

	(metric tons)
JFY 1984	7,000
JFY 1985	7,500
JFY 1986	8,000
JFY 1987	8,500

For these purposes, "orange juice" means 5 to 1 concentrate or equivalent, classified under Statistical Code Nos. 20.07-111, 121, 131, and 141 of the Japanese customs tariff schedules.

EMBASSY OF JAPAN
WASHINGTON, D. C.

II. Grapefruit Juice

The Government of Japan will eliminate import quotas and licensing requirements on grapefruit juice on April 1, 1986.

In preparation for the elimination, the Government of Japan will issue licenses for imports to meet any amount of domestic demand for JFY 1984 and JFY 1985.

For these purposes, "grapefruit juice" means grapefruit juice classified under Statistical Code Nos. 20.07-112, 122, 132, and 142 of the Japanese customs tariff schedules.

III. Beef

(1) The Government of Japan will exert efforts to exploit the demand for high-quality beef with a view to realizing in JFY 1987, the importation of 58,400 metric tons of high-quality beef, within the special and general quotas on a global basis. The increase of 27,600 metric tons over the JFY 1983 level will be phased in incrementally in even amounts each year.

"High-quality beef" will be defined according to the definition agreed to in April 1978.

(2) The hotel quota will be increased from the current 3,000 metric tons per year to 4,000 metric tons per year in JFY 1984 and will be maintained at that level through JFY 1987.

(3) The Government of Japan will introduce a new measure in the Livestock Industry Promotion Corporation's transactions in beef so as to facilitate consultations between foreign suppliers and Japanese users, within the framework of the principle of unified management of beef importation by the Livestock Industry Promotion Corporation.

EMBASSY OF JAPAN
WASHINGTON, D. C.

IV. Beef (Customs Duties)

(1) The Government of Japan has no intention to initiate any increase in the customs duty on beef (Statistical Code Nos. 02.01-111, 119, 121, 129, 139) (the rate of 25 percent is applied currently) under the present price stabilization system of beef.

(2) In the event that a situation makes it impossible to maintain the customs duty on beef at the above mentioned level, the Government of Japan will notify the United States Government of such developments in advance where possible and be prepared to enter into consultations with a view to reaching a mutually acceptable solution, which may include the possibility of appropriate adjustments of the GATT concessions.

V. Other

The Government of Japan will be prepared to consult with the United States Government at a mutually convenient time during JFY 1987 on matters related to the importation in JFY 1988 and thereafter concerning fresh oranges, orange juice, and beef.

THE UNITED STATES TRADE REPRESENTATIVE
WASHINGTON
20506

August 14, 1984

His Excellency Yoshio Okawara
Ambassador to the United States
The Embassy of Japan
2520 Massachusetts Avenue, N.W.
Washington, D.C. 20008

Dear Mr. Ambassador:

I have the honor to acknowledge receipt of your letter of today's date, regarding the implementation of measures concerning fresh oranges, orange juice, grapefruit juice, and beef by the Government of Japan.

Accept, Excellency, the renewed assurances of my highest consideration.

Very truly yours,

WILLIAM E. BROCK

WEB:tdc

OFFICE OF THE UNITED STATES
TRADE REPRESENTATIVE
EXECUTIVE OFFICE OF THE PRESIDENT
WASHINGTON
20506

84/19

EMBARGOED FOR RELEASE
3:30 P.M. EDT
Tuesday, August 14, 1984

Contact: **Desiree Tucker**
(395-4647)
Ellen Terpstra
(395-5006)

INCREASED BEEF AND CITRUS SALES FOR U.S. FARMERS

U.S. Trade Representative William E. Brock today welcomed the measures Japan is taking to increase access to the Japanese beef and citrus market. The Japanese Ambassador to the United States, Yoshio Okawara, notified Ambassador Brock, in a ceremony at the Office of the U.S. Trade Representative, of the measures taken to reduce and eliminate Japanese import barriers of high quality beef and citrus.

Ambassador Brock stated, "By taking these measures, Japan is moving in the right direction to remove trade barriers to competitive U.S. exports. We allow Japan practically unlimited access to the American market and believe they should give us the same opportunity to sell to their consumers. These measures should lead to an increase in trade of $400 million over previous levels. That's good news for American farmers, workers and exporters. The Japanese initiative more than doubles the rate of increase of the previous beef and citrus quotas and includes significant gains in the higher-valued cuts of beef that are used by restaurants and hotels."

According to the notification, Japan will increase purchases of high-quality beef by 6,900 metric tons each year. Under our previous understanding, Japan imported 30,800 metric tons of beef in JFY 1983. These new measures commit Japan to importing 37,700 metric tons this year and 58,400 metric tons in JFY 1987. This means that during the next four years, imports should increase by an additional 69,000 metric tons cumulatively above previous quota levels.

In addition, the hotel beef quota will increase from 3,000 to 4,000 metric tons per year. Beef under this quota tends to be higher-valued cuts that are used by restaurants and hotels. Japan will also increase the amount of imported beef that can be directly sold to Japanese purchasers rather than to the Livestock Industry Promotion Corporation which is charged with maintaining beef prices.

Japan's quota on fresh oranges will increase by 11,000 metric tons per year. The JFY 1983 quota had been 82,000 metric tons. The quota this year is 93,000 metric tons and will increase to 126,000 metric tons in JFY 1987.

The quota on orange juice will increase by 500 metric tons per year. The JFY 1983 level had been 6,500 metric tons. This year's quota is 7,000 metric tons which will increase to 8,500 metric tons in JFY 1987. The requirement that Japanese orange juice products contain Japanese mikan juice has been relaxed so that 50 percent of such products may contain up to 90 percent imported juice.

Japan will eliminate its import quota on grapefruit juice on April 1, 1986. Until then, import licenses will be granted on the basis of domestic demand.

Last April, Ambassador Brock held negotiations with the Japanese Minister of Agriculture, Forestry, and Fisheries, Sinjiro Yamamura, regarding actions Japan could take to improve market access. Ambassador Brock stated, "This concludes negotiations on beef and citrus, as I anticipate all import restrictions will be eliminated on April 1, 1988."

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REMARKS BY
HIS EXCELLENCY YOSHIO OKAWARA

AT THE USTR SIGNING CEREMONY

AUGUST 14, 1984

AMBASSADOR BROCK, LADIES AND GENTLEMEN:

IT IS A GREAT PLEASURE FOR ME TO BE ABLE TO SIGN A LETTER TODAY WHICH WILL BRING ABOUT A SUCCESSFUL CONCLUSION TO CONSULTATIONS ON BEEF AND CITRUS ISSUES BETWEEN OUR TWO COUNTRIES.

AS WE ALL KNOW, THE BEEF AND CITRUS ISSUE HAS BEEN ONE OF THE MOST DIFFICULT ISSUES IN OUR TRADE RELATIONS DURING THE PAST YEAR. AMBASSADOR BROCK, I WISH TO EXPRESS MY SINCERE GRATITUDE TO YOU FOR YOUR STATESMANLIKE LEADERSHIP AND FOR THE DECISION WHICH HAS FINALLY LED THESE DIFFICULT NEGOTIATIONS TO AN END. I ALSO WISH TO THANK ALL PERSONS CONCERNED ON BOTH SIDES WHO HAVE MADE STRENUOUS AND SINCERE EFFORTS THROUGHOUT THE ENTIRE PROCESS OF NEGOTIATION.

THE SOLUTION OF THIS BEEF AND CITRUS ISSUE HAS PROVEN AGAIN THAT THE SPIRIT OF COOPERATION, WHICH IS SO CHARACTERISTIC OF JAPAN-U.S. RELATIONS, CAN SOLVE ANY PROBLEM BETWEEN OUR TWO COUNTRIES. I AM SURE THAT IT WILL CONTRIBUTE TO PROMOTING FURTHER THE FRIENDLY AND COOPERATIVE RELATIONS BETWEEN OUR TWO COUNTRIES.

THANK YOU.

Japan Expands Market for U.S. Agricultural Products

By Richard Blabey and Deborah Rosendahl

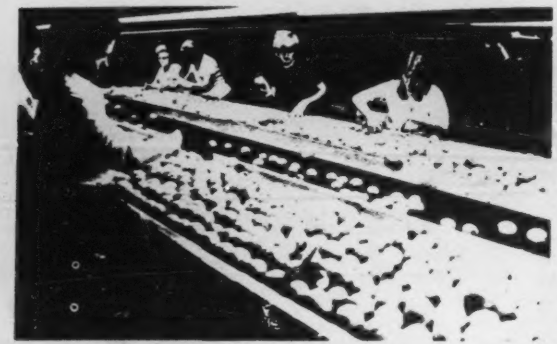
Trade expansion measures announced by the Japanese government in April will mean hundreds of millions of dollars of additional export sales to U.S. agricultural exporters over the next four years.

The measures announced by Prime Minister Nakasone include the Brock-Yamamura beef and citrus agreement, tariff reductions on numerous food products to take effect next April, import liberalization of some specialty items, expansion of a number of non-beef and citrus import quotas and importation of cigarettes by the private trade.

The agreement on beef and citrus reached between United States Trade Representative William Brock and Japanese Minister of Agriculture, Forestry and Fisheries, Shinjiro Yamamura successfully addressed the leading agricultural trade issue between the United States and Japan.

To clinch the agreement, Yamamura pledged that Japan would continue to increase at an accelerated pace high-quality beef and fresh orange imports from Japan- fiscal-year (JFY) 1983 through JFY 1987. (Japan's fiscal years begin April 1.)

The projected value of additional beef and citrus sales to U.S. exporters over the four-year period of the Brock-Yamamura agreement is approximately $400 million. In addition to quota increases, the agreement includes reforms in the administration of beef



and orange import quotas, and changes in the blending requirements for imported orange juice.

Highlights include Japan's agreement to:

- Increase high-quality beef imports 27,600 metric tons above the JFY 1983 base level of 30,800 tons agreed upon during the Multilateral Trade Negotiations (MTN). This increase will be phased in incrementally in even amounts each year.
- Increase fresh orange imports 11,000 tons a year from 1983's level of 82,000 to 126,000 tons in 1987.
- Allow grapefruit juice imports to increase in accordance with demand; then liberalize them completely in 1986.
- Increase orange juice concentrate imorts by 500 tons a year from 1983's level of 6,500 tons to 8,500 tons in 1987.

High-quality beef is imported within Japan's global beef quotas. USDA "Prime" and "Choice" grades satisfy the standard for high-quality beef which remains unchanged from the earlier agreement. While the United States generally supplies practically all of Japan's high-quality beef imports, other countries are eligible to supply high-quality beef to Japan.

Sales of High-Value Meat Cuts To Increase

The Brock-Yamamura agreement provides for increased sales of high-value cuts to satisfy the special needs of the hotel/restaurant trade. U.S. exporters will be able to market a certain quantity of beef directly to end-users under a new transactions system to be implemented by the Japanese Livestock Industry Promotion Corporation (LIPC), which controls nearly all beef imports. Certification of meat by U.S. packers or USDA and abolition of LIPC's system of brand preferencing are also part of the agreement.

The reform of citrus import administration includes announcing the fresh orange quotas in a more timely manner. The "annual" quota (good for 12 months) will be announced in half-year portions in March and September. The "off-season" quota (good for June through August) will be announced in March. Quotas will be allocated to importers in the month following announcement.

The annual increase in the fresh orange quota will be distributed such that a greater portion will be added to the "annual" quota than to the "off-season" quota.

The orange juice quotas will be announced and allocated in October. The requirement that all imported orange juice be blended with domestically produced mikan juice is revised to permit sale of some juice products having up to 90 percent imported juice compared to a previous upper limit of 50 percent.

Agreement Caps 20 Years of Slow, Steady Progress

The Brock-Yamamura agreement is the most recent chapter in a long history of U.S. government efforts to broaden access to the Japanese market for agricultural products.

Until Japan joined the General Agreement on Tariffs and Trade (GATT) in 1955, the majority of its imports were quantitatively restricted for balance of payments reasons. Since 1963, when Japan began to run a positive trade balance, the U.S. government has sought the removal of these restrictions. At present, products in 18 agricultural tariff categories remain under quota.

The most economically significant are those on beef, oranges and citrus juice. In 1983, out of some $6.2 billion in U.S. agricultural exports to Japan, beef and citrus products subject to Japanese import quotas totalled $394 million.

Up until the mid-1970s, Japan slowly expanded the quotas on beef and citrus products. The Strauss-Ushiba Agreement in 1978 signaled a major turning point, as Japan agreed to major expansions over a two-year period. This led the way for the U.S.-Japan Beef and Citrus Agreement reached during the Tokyo Round of the MTN.

This MTN agreement provided specifically for expansion of the quotas over a four-year period (1980 through 1983). Under the terms of the agreement Japan agreed to expand high-quality beef imports by 83 percent, fresh orange imports by 82 percent, orange juice imports by 117 percent, and grapefruit juice imports by 600 percent.

During the most recent series of talks, which began in October 1982 in Honolulu, these quotas were symbols of Japan's many industrial and agricultural import restrictions.

The U.S. public and Congress became concerned that products which the United States produced competitively, i.e., beef and citrus, were being denied free access to the Japanese market while at the same time highly competitive Japanese manufactured products were flooding the U.S. marketplace.

The United States began the Honolulu talks by asking for total liberalization to coincide with the expiration of the MTN Beef and Citrus Agreement on April 1, 1984. However, Japan refused to make any commitment to immediate or eventual removal of the quotas.

Beginning in the spring of 1983, Japan's well-organized farm community mounted considerable political pressure against further import liberalization of beef and citrus. In the face of such stiff opposition, the U.S. government recognized that removing the beef and citrus quotas would have to take place over time and be a step-by-step process.

As the end of the MTN agreement approached, the pace of the beef and citrus talks picked up. Japan indicated in mid-March that it would be desirable to come up with a package settlement—one that covered tariff reductions and quota expansions on the other agricultural products, as well as beef and citrus.

The issues of high tariffs and quotas on other agricultural products had been kept separate from the beef and citrus issue. Bilateral consultations about Japan's other agricultural import quotas began in April 1982. During the course of these talks, Japan made several small expansion offers —but most fell far short of U.S. requests.

Because of the lack of progress bilaterally, the U.S. government initiated in July 1983 multilateral consultations under the auspices of the GATT on 13 tariff categories under import quota. GATT consultations were held again in September but were subsequently put on hold to await the outcome of the beef and citrus discussions.

Ambassador Brock and Minister Yamamura met the first week of April 1984 and reached an agreement on beef and citrus on April 7. Agreement on a broad range of quota issues and tariff reductions followed on April 24, and the entire agricultural package was announced April 27 as part of Prime Minister Nakasone's new external economic measures.

Concerning tariffs, Japan pledged reductions on 32 agricultural products effective in 1985. Twelve reductions were two-year accelerations of final Tokyo Round MTN tariff rates. U.S. exports to Japan of items slated for tariff reduction totaled $480 million in 1982.

The U.S. government, while welcoming the Japanese initiative, expressed disappointment that the package did not contain tariff reductions for wood panel products, fresh grapefruit and walnuts—items of great interest to U.S. exporters.

Variety of Quotas Slated for Relaxation

The package also included the relaxation or liberalization of import quotas on a number of agricultural items. Beginning in JFY 1984 trade in hi-test molasses and other sugars, selected non-citrus fruit purees, pastes, pulps and juices, and various other food preparations containing added sugar was liberalized. Prepared and preserved pork will be liberalized in JFY 1985, grapefruit juice in JFY 1986.

Of the remaining items which were the subject of the GATT consultations, several are to have moderately expanded quotas. Others will have minimum import quotas established. With the announcement of this package, the U.S. Government agreed to suspend the GATT consultations for two years.

The April trade expansion package also revealed Japanese plans to reform the import and distribution system for manufactured tobacco products now under the monopoly control of the Japan Tobacco and Salt Public Corporation.

A bill submitted to the Japanese Diet (Parliament) will permit the private import and wholesale distribution of manufactured tobacco and allow importers to choose wholesalers freely. Currently, U.S. cigarette brands command about 2 percent of the large Japanese tobacco market. ■

The authors are with the International Trade Policy Division, FAS. Tel. (202) 382-9064.

Senator **Gorton**. I have a few questions at least about the semiconductors. To what extent do you feel that the market for United States semiconductors in Japan and the market for Japanese semiconductor products in the United States are the result of a difference in the quality of the products and to what extent to restrictions in the Japanese market, or for that matter in the American market, if indeed there are any?

AMERICAN MARKET WIDE OPEN FOR JAPANESE

Mr. **Prestowitz**. Well, I don't think there are any restrictions in the American market. The United States market is wide open in semiconductors and Japanese share of the market has been increasing at a very rapid pace.

With regard to the Japanese market, I believe that there was a problem in quality several years ago. I think that problem has been resolved. I don't think that current problems have anything to do with quality and frankly I don't think that quality was ever the major problem in Japan. It was a contributing factor but it was not a key one.

And when you ask to what extent is it restrictions in the Japanese market, I think the real question is what do we mean by restrictions?

Senator **Gorton**. Let me include history as a restriction if I may because you commented on that before.

Mr. **Prestowitz**. Well, I think history certainly has had a major impact. If I could relate a conversation I had recently with a friend of mine who was formerly a high executive of a Japanese conductor company, he said to me, "Clyde, you know, the bottom line is that Japanese semiconductor users are going to buy within their own company first, within their economic group second, from Japan third, and from foreign suppliers last. And I think that the statistics that we look at over the past 10 or 12 years are evidence of the effect of that kind of attitude and I think that that kind of attitude arises from a number of considerations.

It arises partly from the efforts of the Japanese Government to focus attention on the importance to the nation in building that kind of industry and it also arises from the nature of the way business is done in Japan. Long-term relationships between Japanese companies are extremely important. If I could just give you an example, recently I was talking to a Japanese chief executive of a Japanese semiconductor manufacturer. He mentioned to me that Hitachi supplies most of the electronics to Nissan and that Mibutsu supplies most of the electronics to Toyota. Toyota buys very little in the way of electronics from Hitachi and Nissan buys very little from Mibutsu. Hitachi and Nissan are related companies; before there was Nissan there was Hitachi. They are in the same family. So it means that—forget about American suppliers. Mibutsu can't crack the Nissan market and Hitachi can't crack the Toyota market because of the very strong ties between those companies. That makes it difficult obviously therefore for foreigners to come in and crack those markets.

Japan has a system in which small companies which are legally independent but which have as their only customers a major company. The ties between those are very close. As you know, Japan has the so-called life-time employment, but life-time employment ends at age 55. The life span in Japan is 75 to 80, so people have got 20 years and they've got to do something, and often they retire from a big company and go to work in the small company. It's a kind of social security system in Japan. So the obligations that are developed between a big company and a small company become moral obligations and when outsiders come in to offer their products they are threatening those moral obligations. That makes it very difficult and I think a combination of that kind of structure with the emphasis of the Japanese Government has put on the building of this into a major national industry has resulted in the situation in which the United States companies find it extremely difficult to penetrate the market and not because of their quality but because of the situation.

Senator **Gorton**. So in addition to the kind of work in which both of you are engaged in attempting to break down formal barriers, I take it it seems clear to you that the Government of the United States or the semiconductor industry or other industries in similar positions or a combination of that somehow or another must create, to the best of their ability to do so, some kind of incentive in Japan to purchase goods and services in the United States that could be a reason for them to want to do so?

Mr. **Prestowitz**. That plus I would also say that Japan has antitrust laws which are very similar to our own and they have not always been applied as vigorously as we apply ours. One of our objectives in our negotiations has been to encourage the Japanese to strengthen the enforcement of their antitrust laws and, as I said, in the case of the soda ash business we were successful in getting them to do that. And this is also an issue that was raised in the case of semiconductors.

JAPANESE FOCUS ON EXPORTS

Mr. **Murphy**. I think you're right, Senator, there is the attitudinal problem Clyde has referred to and in that regard we welcomed Prime Minister Nakasone's statement in April and possibly the statement he made yesterday—I haven't seen it yet—where he attempts to address the attitudinal problem—that is, to urge the Japanese to understand the importance of imports as compared to exports. For most of their history they have focused on exports as being essential to their well-being, a story we have heard ad nauseam. It is beginning to be appreciated among some of the leaders how important imports are in Japan's well-being and until we reverse a lot of the psychology which underlies the system Clyde has described that focuses on buying from Japanese companies that we are going to have a very hard time being successful.

There are some public opinion surveys which support this showing that many Japanese—the majority of Japanese—either do not own nor are they aware of any foreign products that they would like to buy. Part of that is the problem of getting foreign products into their markets so they are aware of them, but also part of it relates to the fundamental psychology they have learned from grade school that they must buy Japanese, that that's essential to the well-being of the Japanese people.

Senator **Gorton**. Are there other nations like Taiwan and South Korea, Brazil for that matter, in other parts of the world that are where Japan was in the mid-1960's in which we are making the same mistakes that we made with respect to the Japanese 20 years ago in allowing them, or even encouraging them, to engage in the kind of activities the Japanese did then with likely consequence 20 years from now that we face here?

Mr. **Murphy**. I think the point you mentioned is very much on the minds of a lot of people dealing with Japan, the concern that those countries will see Japan as a model to be emulated and, to a certain extent, that is true; and we are attempting to address that. But certainly you're correct that they are seeing it as a model and, to an unfortunate extent, I think are emulating it.

Senator Gorton. Thank you. I have some other questions to submit to you in writing.

Senator Riegle is here. Before we go to the private sector group, do you have any questions for these witnesses?

Senator **Riegle**. I'm going to have some questions for the record. I was late in arriving this morning and I'm sorry. I want to thank you for holding this hearing. I have a rather lengthy statement which I would like to put into the record. My statement concerns the dimensions of what appears to be a growing crisis.

[Response to written questions of Senators Sasser, Heinz, Mattingly, Riegle and Proxmire follow:]

OFFICE OF THE
UNITED STATES TRADE REPRESENTATIVE
EXECUTIVE OFFICE OF THE PRESIDENT
WASHINGTON, D.C. 20506

November 12, 1985

FROM: James M. Murphy JMM
Assistant U.S. Trade Representative for Europe and
Mediterranean

Responses to Senator Sasser's questions:

Status of MOSS Negotiations

As you know, the four sectors currently under negotiation as part of the MOSS approach are telecommunications, electronics, forest products, and pharmaceuticals and medical equipment. Contrary to some negative comments which you may have heard, we have made varying degrees of progress in the four sectors: the most progress in telecommunications and the least progress in forest products.

The MOSS talks have entered a crucial period. After nearly one year of high level, intensive negotiations, we have secured the Government of Japan's agreement in writing to resolve outstanding issues wherever possible by the end of 1985, and to implement completely and expeditiously all measures on which an understanding has been reached. This agreement was announced on September 26 by Secretary of State Shultz and Foreign Minister Abe in a joint public report on the MOSS negotiations (copy attached).

However, clearly some of the remaining issues are major, fundamental ones. Their resolution is key to the success of the talks. We have made this plain to the Japanese in the clearest and most forceful terms, in some cases in the face of determined opposition on the Japanese side. We have responded to Japanese opposition by turning up the pressure in a number of ways, including the President's recent announcements about the filing of several section 301 unfair trade actions.

Repeatedly we have reminded the Government of Japan that the U.S. will measure the success of the MOSS talks in terms of 1) an increase in sales by U.S. companies and 2) indications by U.S. companies that they have unfettered access to the Japanese market.

We wish to stress that the December deadline does not mean that we intend to drop these four sectors from the trade agenda. In fact, the deadline is an added means of placing additional pressure on the Japanese to resolve outstanding issues with the urgency they deserve. At the end of December, we will assess their success, and on the basis on that assessment determine how to proceed.

Industry Targeting Practices

Japanese industry and government have been successful in targeting specific industrial sectors, such as semiconductors, for preferential national attention. To the extent that such targeting runs counter to Japan's international obligations, the U.S. has repeatedly sought appropriate remedies in the U.S.-Japan High

Technology Working Group, the U.S.-Japan Trade Committee, or in other fora (including the current 301 action, International Trade Commission hearings, and the focus on semiconductors by the President's newly-created Strike Force.)

To the extent that such targeting does not violate international rules and U.S. laws, Japan's practices may be emulated by U.S.-industry, and to a considerable extent their practices have been. For example in the semiconductor industry, U.S. companies have formed joint research projects, have increasingly sought specialization of their products and market niches, built factories in Japan, focused on low cost suppliers, etc.

Possible U.S. Government Policies

As your question implies, the U.S. does continue to possess superior know-how which can be effectively used to expand foreign markets. However, it is typically understood that "at the time the U.S. still possesses the best ideas on paper, the Japanese are already boxing and shipping those products for sale." While U.S. companies have been effective at licensing their know-how, they have often been less effective than their Japanese competitors at speedily transferring such technology into marketable products. U.S. companies will need to improve in this area or continue to lose competitiveness in world markets.

Recent U.S. Government policies which should improve the trade situation include the lowering of the value of the dollar; creation of a "war chest" to fight tied-aid export credits; formation of the President's Strike Force; and initiation or acceleration of numerous unfair trade actions.

Other suggested changes to U.S. government policies have been often repeated: reduce the federal budget deficit to lower the value of the U.S. dollar to increase competitiveness of U.S. products in foreign markets; increase training in Japanese language in U.S. schools; revise U.S. tax system to provide greater encouragement for capital formation, R&D expenditures, and long-term (not short-term) corporate earnings.

Responses to Senator Heinz' questions

1. Licensing and Certification by Japanese Industry

Your question accurately reflects one of our longstanding complaints with Japan's non tariff barriers. We are encouraged that one of the successful areas of the recent MOSS negotiations has been the modification of this nontransparent certification scheme in some industries. For example, in the MOSS telecommunications negotiations, bilateral cooperation resolved numerous technical standards issues. As a result of these talks, the Japanese Ministry of Post and Telecommunications (MPT) has established an independent plan for approving telecommunications terminal equipment under the Japan Approvals Institute for Terminal Equipment (JATE).

The JATE plan is based upon accepting manufacturer-generated test data to meet standards limited to ensuring equipment does not harm the Japanese telecommunications network. In addition, MPT has also established a private body to address such unresolved issues as developing protocols and demarcation between the network and customers' premises. American companies will have input into this process.

Progress is similarly being made in the pharmaceutical and medical equipment sectors. Negotiations are continuing to extend this type of participation by American companies into other areas so that greater transparency and input will exist in the licensing, certification, and registration of foreign products.

2. Changes in Law Resulting in Changes in Practice

At the highest level of the Japanese Government there is commitment to change in Japan's trading practices. One of the major benefits of the MOSS process has been the continuous involvement of U.S. Cabinet Under Secretaries (or the equivalent) negotiating with their Japanese counterparts.

There have been some problems in transmitting this higher level commitment to change down to the Japanese bureacracy, and therefore the U.S. negotiators have repeatedly provided examples of specific concerns to the Japanese officials responsible for the respective bureacracy.

In addition, much of the work of the MOSS negotiating teams will now move toward implementation of agreed measures. We are closely monitoring the actual results of these measures. U.S. companies have begun testing on a systematic basis whether new regulatory procedures instituted during this year's negotiations are in fact being implemented fully. These companies do a good job of keeping us informed of any problems they encounter so that we can follow up directly with the Japanese Government. The implementation phase also provides a formal mechanism for raising any new issues that may emerge in the MOSS sectors.

3a. Why are the MOSS Negotiations Different?

As you indicate, the previous Japanese trade packages resulted in mixed results, at best. As a consequence, the MOSS approach was selected by the President and Prime Minister Nakasone in January 1985 as a method by which intensive negotiations over a much broader area (i.e. an entire major industrial sector) would be possible. The four sectors selected are those in which U.S. industry has demonstrated world wide competitiveness, and where the size of the potential Japanese market would result in significant trade flows when existing barriers are removed. As noted above, for the first time, the trade talks were led by Cabinet Under Secretary level negotiators. The heightened political visibility and authority of the participants have been helpful benefits as the MOSS negotiations have taken place.

3b. What about the non-MOSS sectors?

The major emphasis on the four MOSS sectors has not lessened the continuing efforts of the U.S. Government on the many other areas where trade problems exist with Japan. In addition, there has been advantageous "spill over" from the MOSS negotiations into other areas. For example, U.S. negotiators have been able to point to Japanese movement in telecommunications certification as justifying improvements in the approval and certification standards in other industrial areas.

Throughout the MOSS process, U.S. trade officials have continued their ongoing negotiations on the many other existing trade issues, particularly in the U.S.-Japan Trade Committee, including tariffs, steel, intellectual property, investment, agricultural and other issues. Additionally, the President has announced the imposition of section 301 actions against Japanese practices in leather and leather footwear, and tobacco.

At the outset of the MOSS negotiations, the Administration agreed to take on additional sectors as our staff resources were freed from the initial intensive negotiating phase of the talks. The identification of additional sectors has been the subject of internal discussion within the Administration in conjunction with private meetings with U.S. industry. At the end of December, the Administration will assess the status of the MOSS negotiations, and on the basis of that assessment, will decide how to proceed.

3c. Possible solutions for change

As has been detailed in the media, economic journals and elsewhere at considerable length, much of the proposed protectionist legislation is simply not helpful for solving the current trade problems with Japan. Such short range "solutions" will invariably end up hurting our country more than Japan. Obviously the broad ranging solution is a reduction in the federal deficit, thereby allowing a cheaper U.S. dollar to stimulate U.S exports.

In the nearer term, the Administration is increasing the pressure on Japan in numerous ways to make improvements in the bilateral trading relationship. The recent section 301 actions, the ongoing emphasis on MOSS sectors, consultations on the NTT Agreement, increased personal meetings between U.S. and Japanese Government leaders, the President's decision to sell Cook Inlet oil, the preliminary discussions of a New Round of Multilateral Trade Negotiations, the creation of trade Strike Forces, and other actions reflect constructive movement in changing the current situation.

4. Comparison of U.S. and Japanese Trade Barriers

As does every country, the U.S. has some trade barriers. However, for the most part our barriers are transparent, open and obvious. The sheer size of our trade deficit clearly indicates that other countries have figured out how to overcome whatever U.S. barriers may exist!

By comparison, the Japanese barriers are much less transparent and obvious. A review of the 1985 Annual Report on National Trade Estimates (as required by section 303 of the Trade and Tariff Act of 1984 and submitted to Congress on October 31, 1985) indicates that Japan has more significant trade barriers than any other country.

Responses to Senator Mattingly's Questions

1. Analysis of July 30 Japanese Trade Package (Action Program)

The Japanese Government's "Action Program for Improved Market Access" makes numerous commitments to reduce, over time, existing barriers to market access in Japan. Until the actual effect on U.S. exports is realized, it will be difficult to judge the effectiveness of the new Action Program. (The White House's Press Release on the Action Program is attached.)

Several portions of the Action Program can be viewed as helpful to both the semiconductor and high technology industries, after its complete implementation in March 1988. For example, tariff cuts on telecommunications and electronic equipment should prove beneficial. In particular, the standards-section is broken into two parts on 1) reducing government intervention, and 2) further implementation of the 1983 "Gotoda Report" (i.e., "The Report of the Liaison Headquarters on Standards and Certification.")

The first part, on reducing government intervention, contains commitments to reduce the items covered by standards; transition to self-certification; and relaxation of standards. The second part, on implementing the Gotoda Report, contains sections on the acceptance of foreign data and use of foreign testing bodies; the ensurance of transparency; adjustment for international standards; and simplification of certification procedures.

Furthermore, in response to Prime Minister Nakasone's recent announcements of market-opening measures, MITI Minister Murata called on 60 leading Japanese companies to cooperate to increase imports into Japan. In light of the July 1985 Action Program, an additional 74 firms were added to this group in August. In September, MITI announced that the total dollar value of imports by these firms in fiscal 1985 (ending March 31, 1986) should amount to $104.6 billion, an increase of $7.3 billion, or 7.5 percent, over the previous fiscal year.

As part of its Import Expansion Program, MITI has reported that an additional $600 million of "electrical machinery and electronic equipment," consisting mainly of integrated manufacturing equipment and electronic parts such as IC's will be imported in fiscal 1985. The U.S. is monitoring progress on this commitment.

2. Reciprocity provision

The 1984 Trade Act (in Title 3) does provide an enhanced standard whereby foreign countries' policies and practices can be evaluated to determine if they deny U.S. companies "fair and equitable access" to foreign markets. This provision should prove increasingly useful as we continue our investigations, including the pending section 301 semiconductor action, into problems of unreasonable foreign market access.

Responses to Senator Riegle's Questions

1. Analysis of July 30 Japanese Trade Package

As indicated in response to Senator Mattingly's question, we will reserve judgment on the Action Program until its effect on U.S. exports is realized. However, there are numerous commitments in the Action Program which could have positive benefits on U.S. exporters, although it is always difficult to project the estimated dollar effects. The MITI Import Expansion Program is a short term commitment to a specific dollar figure (in this case, $7.3 billion).

2. U.S. Government's Response to Japanese Chip Manufacturers

Much has happneded in response to your June 1985 requests regarding investigation of predatory pricing by Japanese firms in the U.S. market. As a result of your inquiry as well as several other requests and the filing of the Semiconductor Industry Associations' section 301 request, in July 1985 the U.S. Trade Representative announced that his office was launching an intensive investigation into Japanese market barriers affecting U.S. semiconductor manufacturers. (A copy of Ambassador Yeutter's press release is attached.)

Because of the sensitive nature of the pending investigation, it is difficult to provide further specific details at the present time. However, it is evident that the Government of Japan in the past has engaged in numerous policies to protect and assist its growing semiconductor industry. These policies included quotas, tariffs, investment restrictions, subsidies and establishment of industry rationalization plans. The resulting Japanese semiconductor market structure is characterized by a high degree of vertical integration and intercompany cooperation.

3. Obtaining necessary information

With respect to the section 301 petition, the bulk of the necessary information has been generally available in various U.S. Government sources. Meetings have been held with Japanese Government officials in efforts to obtain additional data.

Such information has principally been available because for the past several years, U.S. negotiators have met their counterparts in the U.S.-Japan High Technology Working Group to discuss the Japanese semiconductor market and U.S. firms' participation and share in that market. USTR has worked closely with the Department of Commerce and other governmental agencies, as well as private industry, in this effort.

U.S.-JAPAN JOINT REPORT ON THE SECTOR DISCUSSIONS

By Foreign Minister Shintaro Abe
and
Secretary of State George Shultz
New York, September 26, 1985

Pursuant to a meeting between President Reagan and Prime Minister Nakasone in January of this year, the Governments of the United States and Japan initiated an intensive, high-level examination of all aspects of selected sectors to identify and remove impediments to market access. Four sectors were chosen to be addressed initially in these Market-Oriented, Sector-Selective (MOSS) discussions -- telecommunications, medical equipment and pharmaceuticals, electronics, and forest products. The intent of these discussions is to facilitate an increase in Japan's manufactured imports by achieving unimpeded market access for the United States and other foreign countries in these sectors.

The United States and Japan have worked intensively over the past nine months to realize the intent of the MOSS initiative. These efforts attest to the determination of the leaders of our two countries to address and resolve outstanding trade issues and to foster an open trading system. MOSS should be viewed as part of our joint efforts to address various bilateral trade issues -- sectoral, non-sectoral, and structural.

Important progress has been made through these discussions and improvements in access to Japan's markets have been realized. However, continued work by both sides is necessary to ensure full success. Both sides are determined to implement completely and expeditiously all measures on which understanding has been reached. They are determined also, where at all possible, to resolve outstanding issues by the end of 1985.

A compilation of issues for each of the four sectors is provided in the attachment.

ATTACHMENT

I. TELECOMMUNICATIONS

Our initial efforts in the MOSS Telecommunications sector, centering on the liberalization of telecommunications terminal equipment and network services market in Japan, have achieved many successes. Our current efforts have shifted to other issues including radio equipment market access and procedures.

A. Measures in Place

Telecommunications Terminal Equipment Market

1. **Acceptance of manufacturer-generated data and affixing of approval seals.**
2. Reduction of technical standards for terminal equipment to those necessary to prevent "harm to the network."
3. Establishment of an impartial Designated Approval Agency for terminal equipment, with no interested parties in its administration.
4. Establishment of a Designated Approval Agency for all terminal equipment, including those offered for lease by Type I carriers.
5. Simplification of approval procedures for terminal equipment, including a standard processing period for the examination of applications.

Radio Equipment and Services Market

6. Provisions for procurement of U.S.-manufactured communications satellites operating in the Ku band by Type I carriers.
7. Establishment of a Telecommunications Technology Council subcommittee to study technical standards of "cellular telephones", with the view to liberalizing the cellular market in Japan.
8. Suggestion of allocation of available frequencies to facilitate market access for U.S.-manufactured portable data terminals.

Telecommunications Services Market

9. Elimination of foreign capital restrictions on Type II carriers.

10. Establishment of standard processing periods for registration/notification procedures.

Other Measures

11. Appointment of representatives of foreign-affiliated companies in Japan to the Telecommunications Council and the Telecommunications Technology Council.

12. Establishment of an ad hoc committee chaired by MOFA, and consisting of MPT, and U.S. Embassy officials to review any rejected application or grievance concerning the implementation of the Telecommunications Business Law.

B. Measures to be Implemented

1. Establishment of a study group on RPOA status, with foreign-affiliated companies' representation.

2. MPT's intention to eliminate serious and actual market access barriers, if any, in the regulatory procedures including the distinction between General and Special Type II telecommunications businesses and registration and notification requirements, in the near future, as stated in the letter of March 28, 1985, from Vice Minister Koyama to Under Secretary Olmer.

3. Establishment of a standard processing period for certification of conformity with technical standards for radio equipment.

4. Establishment of an independent and impartial standards drafting entity by the private sector similar to the T1 committee in the U.S., which will address outstanding telecommunications issues, including the establishment of telecommunications protocols.

C. Unresolved Issues for Discussion

1. Simplification of procedures for equipment approval in licensing radio stations to criteria necessary for efficient use of spectrum and uninterfered communications of other users, including procedures for acceptance of foreign test data for radio equipment certification and existence of an impartial approval body.
2. Establishment of technical standards and spectrum allocation for cellular telephones which broaden opportunities for new entrants.
3. Tariffing relationship between CPE and transmission services offered by Type I carriers for future digital services.
4. Examination of commercial practices regarding procurement which may affect trade.
5. Clarification of GOJ policy on communications satellite procurement, including broadcast satellites.
6. Establishment of a monitoring mechanism for market access in telecommunications.

II. MEDICAL EQUIPMENT AND PHARMACEUTICALS

The market-opening efforts in this MOSS sector have begun by addressing the trade effects of Japan's regulatory system for protecting public health and safety. As a first step, the Government of Japan acted vigorously and quickly to put into effect eight regulatory measures in response to specific requests by the United States.

In addition to depending on implementation of the agreed measures, the overall success of MOSS talks in this sector will depend on resolution of outstanding issues by the end of the year. These issues, which involve broad, sectorwide policies, are especially important to market access in Japan. To facilitate progress in this sector, the two governments will prepare by year-end a joint report which will document all commitments made and indicate plans for the future. Once major issues are resolved at year-end, the talks will move to a follow-up stage during implementation of Japanese commitments.

A Measures in Place

1. Acceptance of foreign clinical test data for pharmaceuticals, in vitro diagnostic reagents, and devices when no ethnic differences exist.
2. Faster approval for in vitro diagnostic reagents.
3. Simplification of procedures when the country of production changes.
4. Simplification of procedures when minor product modifications are made.
5. Simplification of procedures when the address of the importer changes.
6. Creation of a procedure to permit "friendly" transfers of manufacturing approvals.
7. Increased transparency of approval and examination process for pharmaceuticals and devices.
8. Simplification of import clearance procedures for approved products through a single clearance by Customs.

B. Measures to be Implemented

1. Installation of a "time clock" for approvals of new drugs and devices to set time limits on MHW approval process. The "time clock" would give MHW flexibility in case the time limits could not be met, but would require MHW to provide an explanation in such cases (similar to FDA procedures).

C. Unresolved Issues for Discussion

1. Development of procedures in both the approval and reimbursement areas that recognize the special benefits and characteristics of procedure kits.

2. Creation of a simplified procedure for granting regulatory approvals, including cases of "unfriendly transfers," when such regulatory approvals have previously been issued to another entity.

3. Establishment of procedures to ensure transparency in setting health insurance reimbursement rates and to set the timing of the listing of new products. The objectives are to allow applicants to present relevant facts, create opportunities for comment on proposed rates, and provide for the timelier marketability of approved products.

4. Taking into account the role of scientific factors (to be worked out by technical specialists from both governments), examination and, where appropriate, modification of criteria for determining whether vitamins and health foods are to be approved as pharmaceuticals or foods.

5. Examination of regulatory procedures for imported blood and biologicals, including testing requirements, to ensure that they are based on reasonable scientific criteria (to be worked out by technical specialists from both governments).

III. ELECTRONICS

The MOSS Electronics effort has resulted in significant measures taken by the Government of Japan that, when implemented, should improve market access for U.S. manufacturers entering the Japanese market. The GOJ has also responded positively to USG requests for information and clarification concerning various aspects of Japan's electronics industry. Several important issues remain unresolved, however, and additional work is required to promote further access in this sector.

A. Measures in Place

1. Passage of the Semiconductor Chip Protection Law.
2. Amendment of the Copyright Law explicitly to extend protection to computer software.
3. Elimination of the procedure required for foreign exchange transactions involving machinery upgrades and products reimported into Japan after being repaired abroad.
4. Agreement in principle to eliminate Japanese tariffs on computer parts, central processing units, and peripherals and to eliminate U.S. tariffs on computer parts.
5. Decision to eliminate tariffs on telecommunications equipment of interest to the U.S.

B. Measures to be Implemented

1. Issuance of ordinances for the Semiconductor Chip Protection Law.
2. Implementation of revision of Copyright Law explicitly to extend protection to computer software.
3. Implementation of tariff reduction/elimination:

   a. Reduction by 20% of tariffs on electronics products;

   b. Elimination of tariffs on telecommunications equipment of interest to the U.S.; and

   c. Elimination of tariffs on computer parts, central processing units, and peripherals and elimination of U.S. computer parts tariffs.

4. Implementation of measures to expedite and improve the patent process.

5. Increased access to patents obtained through GOJ-sponsored R&D, including an agreement between a major U.S. company and MITI.

6. Participation in funding and R&D by U.S. companies in the Sigma Project, a long-term GOJ-sponsored R&D project for the production of software.

7. Continuing examination of future activities of the Semiconductor Equipment Association of Japan (SEAJ).

8. Continued monitoring/examination of new high technology promotion laws to assure there will be no trade restrictive or distortive aspects.

C. Unresolved Issues for Discussion

1. Examination of semiconductor market, investment, and trade issues.

2. Examination of commercial practices in the distribution system that may affect trade.

3. Procurement of non-communications satellites.

IV. FOREST PRODUCTS

A. Measures in Place

Wood Products

1. Exchange of information to improve understanding of the problems and the particular characteristics of each other's forestry and forest products industries.
2. Confirmation that the restructuring plan for Japan's forest products industry will take into account OECD and GATT guidelines.

Paper Products

1. Exchange of information to improve understanding of the problems and characteristics of each other's paper products industries.

B. Measures to be Implemented

Wood Products

1. Prompt implementation of the necessary tests in order to adopt lodgepole pine and ponderosa pine as types of trees which can be used as materials for structural laminated lumber.
2. Discussions of possible joint promotional activities to expand demand in Japan for wood products.
3. Prompt commencement of studies to establish product standards for structural panel products, such as newly-developed oriented strandboard, waferboard, etc.
4. Appointment of representatives of foreign interests as members of the technical sub-committees of the research committee for agricultural and forest standards and admission of representatives of foreign interests to participate in the drafting of standards, as stated in the Action Program.

5. Review of fire and building codes to identify possible measures which could stimulate greater use of wood and wood panel products.

6. Reduction of tariffs by twenty percent on transom and other builders carpentry and joinery from the earliest possible time in 1986.

Paper Products

1. Reduction of tariffs on all paper products (including kraftliner, etc.) by 20 percent from the level reduced in April 1985 at the request of the U.S. Government, at the earliest possible time in 1986.

2. Meetings between U.S. paper product producers and Japanese consumers to exchange information.

C. Unresolved Issues for Discussion

Wood Products

1. Tariffs. The Government of Japan announced that reduction of tariffs on plywood and other panel products would be implemented as from April 1987 pursuant to the April 9 decision on "External Economic Measures."

2. Procedures for developing structural standards for panel products such as newly-developed oriented strandboard, waferboard, etc.

3. Procedures for certification of U.S. wood products.

4. Distribution system.

Paper Products

1. Tariffs.

2. The corrugated containerboard joint action under the Structural Improvement Law.

3. Excess capacity in the Japanese paper industry.

4. Commercial, business, and funding practices that may affect trade.

THE WHITE HOUSE

Office of the Press Secretary

For Immediate Release July 30, 1985

STATEMENT BY THE PRINCIPAL DEPUTY PRESS SECRETARY

The Government of Japan today announced its Action Program for Imports. This Program is to be the framework for Japan's market opening activities over the next three years. It fulfills a commitment by Prime Minister Nakasone to provide such a program by the end of July. However, it is difficult to determine from the announcement whether the program will remove the bulk of these barriers in a timely fashion. So, we must reserve judgement until the effect of the program on our exports is realized.

The Program focuses on long-term access to the Japanese market. Effective implementation of its initiatives would remove numerous non-tariff barriers to trade with Japan. While a long-term effort is welcome, earlier implementation would help resolve the crucial trade problems confronting us today.

The Action Plan focuses primarily on specific trade barriers. But the removal of such barriers will not result in more imports without an accompanying increase in the willingness of Japanese businessmen and consumers to purchase imported goods. We hope the Prime Minister's countrymen will heed his call to reevaluate and alter their attitudes toward imports.

An encouraging note is the recognition of the need for domestic demand expansion which would result in higher levels of imports. Also announced are steps on the path to capital market liberalization, which we have long encouraged. We are especially aware of the need to improve investment opportunities in Japan.

This Program comes at a crucial time in Japan's trading relations with us and with her other trading partners. While United States relations with Japan are amicable and cooperative in nearly all respects, trade issues have been a source of deep and growing concern. U.S. firms believe strongly that they have less access and opportunity to compete in the Japanese market than Japanese firms enjoy here. The Administration has made righting this imbalance of market opportunities a number one priority with Japan. We will continue discussions with Japan in an ongoing effort to resolve these troublesome trade frictions. This afternoon the Economic Policy Council will begin a thorough examination and analysis of the plan. We will have more to say upon completion of this review.

OFFICE OF THE UNITED STATES
TRADE REPRESENTATIVE
EXECUTIVE OFFICE OF THE PRESIDENT
WASHINGTON
20506

FOR IMMEDIATE RELEASE 85/10

July 11, 1985

Contact: Desiree Tucker
(395-4647)

YEUTTER ANNOUNCES DECISION TO INVESTIGATE SEMICONDUCTORS

U.S. Trade Representative Clayton Yeutter today announced that he has initiated an investigation of Japanese market barriers in electronics based on a petition filed on June 14 by the Semiconductor Industry Association.

"The industry's petition raises serious questions about possible Japanese market barriers in microelectronics that deserve a thorough investigation," Yeutter said.

Under Section 301 of the Trade Act of 1974, the U.S. Trade Representative has up to a year to investigate such a petition, once accepted. If there is a finding that there were unfair trade practices, the Trade Representative may recommend that the President impose retaliatory restrictions on the offending country's exports to the U.S.

"USTR staff will be meeting with Japanese officials shortly to open discussions of the case," Yeutter said.

RESPONSE TO WRITTEN QUESTIONS OF SENATOR SASSER
FROM CLYDE V. PRESTOWITZ

Q. The "MOSS Talks," or market-oriented, sector-specific talks between the United States and Japan, are designed -- as one commentator put it -- to "search for the protectionist needles in the Japanese haystack."

There have been six major rounds of market-opening initiatives since 1982. During that time, the U.S. trade deficit with Japan has soared, to $36 billion in 1984. Only two years ago, it was $21 billion. The estimate for 1985 is around $50 billion. It seems the more negotiations we have, the higher the trade deficit with Japan becomes.

Nonetheless, high hopes have been pinned on the MOSS talks.

Now, I have heard of references being made by American Embassy staff in Tokyo that "MOSS" in fact stands for "more of the same stuff." An executive of an American high-tech firm in Japan has been quoted as saying that the Japanese response to "MOSS" is to be a rolling stone."

All flippancy aside, how would you interpret these comments? What is giving rise to these cynical attitudes and what hope is there that things will change?

A. The progress of our efforts to open the Japanese market has been slow. Announced liberalization measures have been threatened by bureaucratic backtracking. There have been cases where we have spent a lot of time on one barrier (for example, a tariff) only to discover that other, more formidable obstacles remain. In some cases, such as cigarettes, even substantial changes in the regulatory system have produced only very meager results in terms of U.S. sales. All of these factors contribute to an understandable amount of cynicism.

The MOSS process incorporates what we've learned. We are dealing with all barriers in a sector, not just those on the surface such as tariffs or quotas. We are discussing products in which U.S. firms have proven their competitiveness world-wide. Trade negotiations with Japan will remain difficult, especially as we address structural problems. Nevertheless, I believe we are making real headway in many areas, especially telecommunications. Difficult unresolved problems such as wood product tariff cuts, and semiconductor market access remain on our MOSS agenda.

Q. A good deal of the discussion here this morning has related to Japanese targeting and Japanese barriers.

And over the past several months, most of the energy of the trade debate seems to have focussed on the need for the United States to match the Japanese barrier-for-barrier. The idea, of course, is not to grind world trade to a halt, but to encourage a relaxation of barriers. It may well be that the threat of retaliation is an effective means of producing this result.

I want to direct attention for a moment, though, to the possibility of moving this competition away from the de-fensive side, and into the of-fensive side.

We have pointed to some of Japan's targeting tactics as being unfair to American industry.

What tactics are available to American industry to pursue the same cause?

What policies should the Federal Government be pursuing to take advantage of superior American know-how in expanding foreign markets?

A. The United States Government does not control U.S. industrial development by directing economic resources to specific industries, except during periods of national emergency.

American industry does not presently have the opportunity to plan its tactics with the coordinated support of the U.S. Government to direct resources to specific sectors of the U.S. economy. The Government does not constrain the freedom of entrepreneurs to plan their own investment and operations. Resource allocation decisions are made by free markets for the inputs of capital, labor, and other resources needed by the private sector of the economy. Further, leaders of U.S. industry have recommended, as part of a national strategy for U.S. industrial competitiveness, that the Government limit its role in the economy to "provide an economic environment which stimulates innovation in the private sector and helps resources adapt to changing competition." (Committee for Economic Development, New York, Strategy for U.S. Industrial Competitiveness, April 1984.)

Private corporations can use a variety of legal means to plan tactics for targeting an export market. U.S. investment tax credits are permitted by current law, cooperative and joint R&D associations with leading technical universities and even other companies involved in the same industry are permitted, certificates of exemption from Anti-Trust law are granted to Export Trading Companies. Numerous voluntary industry associations monitor international competitive conditions, report market trends in imports and exports, and provide counsel and advice to the U.S. Federal Government. Many of the largest U.S.-based corporations--among the most successful U.S. exporters--devote considerable personnel and managerial attention to planning for a global marketing strategy. Though this is not the same as an industrial targeting approach, such strategic planning has often served to expand the international marketing activities of these industries.

The Federal Government should continue to promote the expansion of the global trading system and enforcement of other nations' reciprocal obligations in accordance with the General Agreement on Tariffs and Trade (GATT). The U.S. national economic interest is served by maintaining trade and investment flows, and by preserving and expanding access of U.S. exports to foreign markets.

The U.S. should be vigilant to assert its national economic interests and to assure our business and investment communities that the Government is maintaining the rules of international trade and meeting the challenges of new problem areas.

Q. You were recently quoted as saying that "when the Japanese sit down to negotiate market-opening measures, it doesn't occur to them that a recession cartel or a government-sponsored applied-research project might restrict trade. They just don't understand markets the way we understand markets."

How reasonable is it for the United States, then, to expect the Japanese to change their system unilaterally, when it works so well for them?

Don't we need to go to the bargaining table with something to give away -- say a credible threat of retaliatory action?

A. I have no doubt that attachment, loyalty or allegiance to the existing system in Japan has been a major factor in retarding progress of our negotiations. Many of the senior policy making officials spent their early careers building this system which helped account for Japan's phenomenal post-war recovery. We often encounter a significant difference of perception between U.S. and Japanese negotiators in areas such as depressed industry policies, assistance to emerging industry, antitrust enforcement and market structure.

To a degree, this view held by Japanese officials is changing. They realize that Japan can no longer assess it interests in an introverted manner. Policies must be measured by their international ramifications and the reactions they generate in Japan's trading partners whose markets are vital to Japan's continued well-being. This evaluation has already resulted in changes to some policies which were effective years ago, but which now are outmoded or even counterproductive. It is a slow, yet fundamental change.

While we must be willing to retaliate against unfair practices, our most effective tool is to convince Japan that certain of its policies must change, not for some theoretical text-book reasons, but because they are now inimical to Japan's own self-interest.

I would note that the President made clear in his recent trade statement that retaliation will be taken when justified. The new Strike Force's work and the self-initiated section 301 actions are evidence of this.

RESPONSE TO WRITTEN QUESTIONS OF SENATOR HEINZ
FROM CLYDE V. PRESTOWITZ

Q. It has been argued that the licensing, approval, and registration of products is frequently done by industry representatives, who themselves form a sort of guild. Thus, the industry becomes a quasi-governmental cartel. The Government, however, can claim that they themselves are not discriminating or engaging in restrictive practices, but the effect is the same as if it were an official action nonetheless.

How do we deal with that sort of barrier, short of asking the Japanese to change their governmental and industrial structure?

A. U.S. Federal Government officials have often been successful at changing such practices when they have been exposed. Private sector decisions to refuse to allow U.S.-made tennis balls to be used in tennis tournaments in Japan, for example, serve as a reminder that not all groups in Japan share Prime Minister Nakasone's commitment to removing barriers to imports.

Publicity about such practices and frequent reference to such self-serving nationalistic groups has sometimes resulted in considerable embarassment to the Japanese Government officials responsible for Japan's international trade relations. These officials have then often used their administrative powers to recommend changes in such private--and often secret--standards setting practices. The difficulty for American business is often in finding out about such practices and in obtaining prompt U.S. Government attention to make appropriate representations to the Japanese Government. Commerce Department work to bring such private standards setting practices to light needs the support of interested U.S. law offices, standards bodies, and testing organizations.

Further, the expansion of U.S. access to the Japanese and other markets will result in a stronger organizational presence in the Japanese economy. Allowing more U.S. lawyers to offer their advisory services to foreign clients in Japan would increase the amount of "knowhow" available to U.S. exporters, who often turn to their attorneys for a variety of marketing and business advice.

The Commerce Department led in recommending to Japan that political commitments to improve the standards and certification systems such as the Gotoda Commission Report of 1983 should include the appointment of representatives of non-Japanese organizations to industry associations and private standards setting bodies. The Japanese implementation of this recommendation has been slow and the numbers of foreign representatives are still low.

The Commerce Department, in pursuing discussions with the Ministry of Posts and Telecommunications concerning the approval process for terminal equipment, assured U.S. equipment manufacturers of equitable treatment by making sure that officials appointed to the regulatory body would have no conflict of interest due to employment ties to Japanese equipment makers. More such work is needed in numerous other Japanese approval and certification systems.

Q. It has been argued that, although many laws guarantee unimpeded access to the Japanese market, in reality these guarantees prove worthless. In many ways the Japanese legal structure for trade resembles the Soviet Union's constitutional commitment to civil rights and civil liberties--the commitment on paper does not match the reality.

How do we ensure that changes in laws are matched by changes in practice?

A. The Department of Commerce has frequently noted that tradition-bound practices of mid-level Japanese bureaucrats frustrate rapid and complete implementation of the trade liberalizing commitments of Japanese politicians and high level officials. The United States has often heard promises to open markets and simplify administrative systems. The test of such commitments must be their implementation throughout the administrative bureaucracy. The Commerce Department must continue to solicit U.S. business representatives' experience with administrative officers of Japanese ministries, including lower level customs officials, regulatory agency officials, and quasi-governmental approval organizations. These experiences, to the extent problems exist, must then be reported to policy makers and trade negotiators.

The U.S. must demonstrate that our Government has a long term commitment to achieving access to Japan and other major industrial nations' domestic markets. The Government must conduct formal reviews and evaluations of outcomes of our trade negotiations, and provide for a means of giving attention to the details of implementing ordinances, regulations, and practices.

We are dealing with many sectors beyond MOSS. There are the 301 cases. The Strike Force is well on its way to addressing unfair trade practices. We have undertaken a renewed initiative on auto parts. Many problems in the services sector (lawyers, shipping, financial services) are under discussion. There are ongoing fisheries and agricultural negotiations.

I do not believe that a surcharge is the answer. It's negative ramifications are too great. Rather, we must make it clear to Japan that we will act against unfair or unreasonable practices if our negotiations to eliminate them are unsuccessful. It is a more selective, but efficient approach.

Q. The history of our negotiations with the Japanese Government is a history of excruciatingly slow progress. As I have observed it over the past decade, we initially ask for reform along a broad front. Then the Japanese negotiators break the demands into discreet requests on particular laws or regulations dealing with particular industries. Then begins a negotiating process in which we are salamied -- or sushied -- slice by slice by our Japanese counterparts until we come to an agreement, which is then undone by a recalcitrant bureaucracy, or undone by changes in practice which make the new law or regulation irrelevant to the new situation.

Currently, we are once again involved in sector negotiation on telecommunications and three other sectors. What guarantees are there that the outcome will be any different from the five failed trade packages that have come before it?

What about the hundreds of other sectors that we are not negotiating about at the moment?

The core of the problem seems to be the Japanese system itself, and we are never going to reform that system in a series of discreet negotiations on particular sectors. At that rate we will be well into the 21st Century before there will be any meaningful change -- and as Keynes said, in the long run we will all be dead. Unfortunately, I fear that a number of otherwise competitive U.S. industries will be dead as well.

Short of a 20 percent surcharge, or some other harsh medicine, how do we break out of the frustrating cycle I have described?

A. There is a fundamental difference in concept between the approach which led to the GOJ trade packages and that which we are pursuing in MOSS. The trade packages aimed at a wide array of trade barriers across many sectors. They were often announced with great fanfare, but implementation was slow or non-existant. Even when fully carried out we faced a sitation where one barrier to a product's entry into Japan was reduced (tariff, quota) while other barriers (cartels, distribution obstacles) remained and no real increase in sales resulted.

MOSS aims at eliminating all barriers in a broad sector. If successful, we will have eliminated the layering of barriers which has been such a problem in the past.

Q. Fred Bergsten, former Assistant Secretary of the Treasury for International Affairs, recently argued that Japanese trade barriers are really no worse than those found in the United States. How would you react to that assertion?

Isn't it true that while U.S. barriers are transparent and obvious, Japan barriers are for the most part hidden, informal, and frequently unofficial?

A. The United States "protects" domestic sugar suppliers, book publishers, suppliers of benzenoid chemicals, ceramic tiles, canned tuna, rubber footwear, steel, textiles, motorcycles, peanuts, and certain dairy products, according to a recent Wall Street Journal article. Yet even Mr. Bergsten would not argue that such restrictions put large areas of the U.S. market off limits to foreigners. Even among the industries listed as "protected," in many cases imports take a significant share. Despite high tariffs on motorcycles over 750 cc, for example, 99% of the U.S. market belongs to foreign suppliers (principally the Japanese). Some 23% of domestic auto sales are imported passenger cars. Imported textiles have threatened the economic viability of many U.S. producers.

U.S. protectionist measures are the result of a political and legislative process conducted in the open, reported by the best investigative press in the world. Consumer advocates and organizations, the U.S. retail industry, and the U.S. distributors of imported goods are all powerful participants in the public policy debate on legislation. Further, the judiciary reserves the right to supervise the implementation of legislation and to test its constitutionality. Thus due process is guaranteed to foreign exporters seeking access to the U.S. market. Such an exporter may avail himself of the services of public relations, lobbying, and legal representatives to assure that his economic interests are well protected.

In contrast, in Japan, for historical reasons, foreigners and their intrests have frequently been specifically excluded from consideration. The American heritage of English law and precedent set in place a fundamental system of checks and balances among branches of government, insuring that due process guarantees provided to citizens could be protected. Such U.S. institutions as powerful retailer and consumer groups, the body of Anti-Trust law and the activities of the Fair Trade Commission limit marketing powers of U.S. producers. Such Japanese institutions as the Fair Trade Commission and modern national department store chains are not as strong as their U.S. counterparts.

As in cases of private corporate practices that discourage foreign bidding on procurement, or the use of foreign tennis balls in tournaments, or limit the amount of information available to a select "family" of suppliers, Japanese forms of protectionism are often hidden, informal, and unofficial. Information is a valued commodity in Japan, viewed as dangerous in the "wrong" hands by officials. Americans doing business in Japan often find that legal services and access to the courts are generally expensive and slow.

Even if certain U.S. suppliers receive preferential treatment in accordance with the legal and political processes of the U.S., this does not justify Japanese protectionism. Further, the Japanese are full participants in the public policy process in Washington, D.C., and elsewhere in the U.S. Americans generally lack comparable access to Japanese politicians and policy-making officials of the bureaucracy. This lack of participation in the public policy process needs work by both Governments: the Japanese must give more opportunity, the U.S. government must make greater efforts to represent and assert U.S. economic interests during the often closed-door Japanese policy debate.

Q. The Department of Commerce has estimated that U.S. exports to Japan could be increased by $10 to $12 billion if Japanese trade barriers were really removed. Could you give us some idea of the basis for this estimate?

A. The U.S. Department of Commerce examined market shares for certain U.S. exports in Western Europe, compared them with the numbers for the same exports in Japan, adjusted for the different sizes of the economies, and calculated a number for potential expansion of exports. The simple assumption of this procedure was that competitive U.S. exports should have about the same market share in comparably sized advanced industrial markets. Since market shares for certain commodities were less in Japan, this was assumed to be the result of barriers to imports.

RESPONSE TO WRITTEN QUESTIONS OF SENATOR MACK MATTINGLY
FROM CLYDE V. PRESTOWITZ

Q. I understand that both the Commerce and Education Departments are initiating programs designed to "teach" U.S. businessmen how to best approach doing business in Japan. Can you tell us a little bit about these programs and their status?

A. The U.S. Department of Commerce conducts seminars on exporting at all of its domestic offices. Exporting to Japan is a popular theme. Commerce Department speakers with previous work experience in Japan are often supplied to such seminars, and to similar teaching opportunities organized by private parties or state and local governments.

I am not in a position to comment on any program conducted by the Department of Education.

Q. As you may know, I am chairman of the Senate Republican Conference Task Force on Technology and Development, a task force on which this subcommittee's esteemed Chairman also serves. During the upcoming recess, members of the task force will be studying ways in which emerging technology can best be applied commercially in an effort to enhance this country's competitiveness. Can you, Mr. Prestowitz, suggest any ways in which the Congress can act to positively and specifically encourage such innovation? Can you suggest ways in which U.S. law or policy discourages technology or innovation?

A. The study of U.S. Industrial Competitiveness prepared by the committee chaired by John Young, CEO of Hewlett-Packard, went into these issues in great detail. We in the Department of Commerce support most of the recommendations made in that study. Many are already being implemented.

Of particular interest to the D.O.C. are the following issues:

(1) increasing access by private sector business, state and local governments, and not-for-profit organizations to technology resulting from work done by Federal laboratories;

(2) a tax policy which is conducive to the process of technology innovation;

(3) U.S. Government adoption of competitiveness as its number one economic priority.

We note that the Administration's Economic Policy Committee has recently formed two working groups in this area, one on "R&D and Competitiveness." The D.O.C. will play an active role in both these working groups.

RESPONSE TO WRITTEN QUESTIONS OF SENATOR RIEGLE FROM CLYDE V. PRESTOWITZ

Q. During the discussion of Hitachi's "Win with the 10 percent rule" Senator Heinz asked you, "Have you ever seen anything this bad?" and your response was "Yes, I have."

Would you please supply us with other examples of Japanese practices which you had in mind?

A. Japanese exporters to the U.S. have often pursued a strategy of building market share. Pricing policies have often promoted the expansion of sales, even at the sacrifice of some short-term profit.

When NTT (Nippon Telegraph and Telephone Public Corporation) awarded a procurement contact to the Motorola Corporation for pocket pagers in 1983, several Japanese exporters of pocket pagers to the U.S. announced price cuts of up to 50%. Many industry observers viewed such pricing as both retaliation against Motorola's hard fought entry into the NTT market and as predatory. In fact, Motorola successfully brought a dumping complaint against such practices.

Similarly, the ITC (International Trade Commission) recently found that mobile phones were selling in U.S. by margins of 3-100% less than the fair value of sale price in Japan. As a result of such pricing, the Japanese have 75% of the U.S. market.

In the last several years, the Japanese have aggressively marketed a range of consumer and industrial electronic goods in the U.S. including: color TV's, industrial fasteners, tapered roller bearings, portable electric typewriters, and bicycle speedometers.

Q. On July 30, the Japanese government announced new steps in Prime Minister Nakasone's "action program", which is intended to open Japan's markets to exports. Please provide the Committee with your agency's evaluation of the effectiveness of those announced steps. Can those steps reasonably be expected to improve the ability of U.S. semiconductor firms to compete in the Japanese market? What dollar increases in U.S. exports to Japan are estimated to result from adoption of the announced measures -- for the semiconductor industry and for those U.S. industries that stand to gain the most?

U.S. semiconductor firms have charged that Japan's protected market permits Japanese manufacturers to build up massive capacity to produce chips and ship them here and to other markets at prices that even the most efficient non-Japanese competitors cannot match. In what ways can this process prevent U.S. firms from competing successfully in subsequent generations of chip technology? What evidence suggests the seriousness of this future problem?

U.S. firms have long faced severe obstacles to entry into the Japanese semiconductor market. What organizational or legislative obstacles have prevented the U.S. Government from taking effective action earlier?

Does the U.S. government have ready access to all of the information needed to respond to the Section 301 petition filed by the SIA? Is all of the necessary information available in the Commerce Department, the Office of the USTR or elsewhere in the government? What is your agency doing to improve the information needed to assure fair treatment for our firms and their workers? How else could the U.S. government improve the quality and timeliness of this information?

A. The Action Program, if implemented fully, will have beneficial effects in certain areas. Most important are standards/certification and government procurement. It is still too early to tell what effect MITI's efforts to encourage increased foreign purchases by 134 major Japanese firms will have, but to date the dollar amount of increased purchases has not been significant.

I do not believe that the Action Program will have much effect on the ability of our semiconductor firms to sell in Japan. The effects of increased government procurement from abroad will be indirect at best since few government agencies buy chips. Standards/certification, except for NTT, are not problems for semiconductors. Much more important will be our efforts to break down barriers such as the interdependent purchasing patterns among Japanese semiconductor purchasers and users and to break into government sponsored R&D programs. In addition, domestic demand stimulation in Japan will help spur sales of electronic products which are the primary users of chips.

It is impossible to quantify the potential effects of any effort such as the Action Program which will cut across numerous product sectors. It is safe to say that its effects will be more pronounced on industries such as pharmaceuticals, medical equipment, etc., which will benefit most from improvement in standards/certification, the real heart of the Action Program.

There were no organizational or legal impediments to action by the Executive Branch. As you may be aware, we did discuss the problems of access to the Japanese market for semiconductors in the High Technology Work Group. As a result of these discussions, MITI agreed to contact Japanese semiconductor users and urge them to increase the opportunities for U.S. suppliers to sell in Japan. MITI did this and, for a while, there were significant gains in our sales to Japan. Unfortunately, when the market turned down, these sales dropped off. Long-term supplier relationships had not been established.

During these discussions and the period of product sales increase, it was not deemed advisable to pursue other avenues of approach such as legal action. In addition, current problems such as extremely low pricing here and in Japan did not exist. It is these factors, rather than any legal constraint, which dictated our course of action.

As mentioned previously, the High Technology Work Group devoted a great deal of time and effort to the semiconductor trade and market access issue. A great deal of information is thus available. In addition, we have had technical discussions with the GOJ on issues raised by the SIA in its petition. The GOJ has had a full opportunity to present its views and to supply information relevant to this case.

Although we do not possess full details on all aspects of this case, we have exhausted available sources and will proceed on what we do have to assure fair treatment for our firms and workers.

RESPONSE TO WRITTEN QUESTIONS OF SENATOR PROXMIRE FROM CLYDE V. PRESTOWITZ

Q. Clearly a central issue in our trade problem with Japan in semi-conductors is that the U.S. government permitted the Japanese government to protect its home market far beyond the time when any justification could be made for such protection. This occurred in other Japanese industries as well.

My question is whether we are now making the same mistake with other newly industrialized countries such as Taiwan, Korea, Hong Kong and Brazil. Should we not develop a consensus and a government policy on how we will deal with efforts by others to protect their infant industries?

A. Challenges to the GATT and the international trading system which has evolved since 1945 come in many forms from many directions. The newly industrializing nations have in many cases mobilized capital, labor, technology, and other resources to promote a national economic growth strategy based on growth in manufactured exports. Such NIC's can only expand their exports to the extent that other nations permit them access to their markets. All participants in the international trading system, including the advanced industrial democracies of OECD, have a stake in maintaining a system which promotes prosperity through the expansion of global output. The challenge of industrial adjustment in such advanced industrial democracies as the U.S. and Japan, for example, is to find ways to ameliorating the pain of regional or sectoral dislocation. In both countries, changes in energy and commodity prices, as well as changing technology and investment flows, mean that previously strong sectors of the domestic economy are hit by import competition. The United States must become an active advocate for a system of international rules on the treatment of infant industries in NIC's, and review the treatment of structurally depressed industries (steel, aluminum, etc.) in other nations.

STATEMENT OF SENATOR DONALD W. RIEGLE, JR.

Mr. **Riegle**. Mr. Chairman, I want to thank you for agreeing to my request for this hearing. Semiconductors are the very heart and brain of modern production. The performance of the U.S. semiconductor industry will profoundly affect the ability of all U.S. industries and their workers to regain and maintain a competitive edge.

Today's hearing is very timely. At 8:30 this morning, the Commerce Department released trade data for June. They show that our trade crisis with Japan worsened to a new monthly record of $4.573 billion. Exports to Japan remained constant as Japanese exports to the United States rose, largely as a result of relaxing the auto import agreement. Our multilateral trade deficit for the first 6 months of this year hit $70.7 billion—more than the trade deficit for the entire year 1983. Congress is considering several major bills to remedy that growing crisis. And this morning's newspapers report that the Japanese have just announced new measures to open their market. Such announcement from Japan usually sound better on first hearing than after they receive careful scrutiny. So it will be helpful to hear how our witnesses judge the effectiveness of these promised steps.

Also, today's hearing concerns a strategically vital industry. United States exports to Japan are primarily raw materials, such as corn, oil seeds, coal, lignite, and peat. Japanese exports to this country are primarily manufactured goods, such as autos and consumer electronics. The Japanese have now openly targeted commercial electronics—the production technologies of the future—as their next goal for domination. The semiconductor chip is the building block of this strategy.

For years, now, a long line of United States industries have called attention to Japan's unfair trade practices. Those practices have hurt a number of our industries—agriculture, steel, autos, machine tools, and the list goes on. Some have tried to argue that lost jobs in these basic industries are not important and that the United States can simply move on to dominance in high technology industries. But now it has become clear that American semiconductor and other high technology industries are also vulnerable. In recent months, they have lost profits and market share dangerously and have laid off tens of thousands of people.

Japanese leaders have tried to shift the blame to American workers and managers and the overvalued dollar. But in a number of industries there is ample evidence that the Japanese success has been achieved by their infant industry protection laws, by predatory pricing, and by a myriad of indirect trade barriers. American firms and their workers cannot continue to battle alone against that kind of unfair competition.

The semiconductor experience is a very important case. American firms are the acknowledged world leaders in the production of semiconductors, with 55 percent of the competitive worldwide market. Yet, the market share of American firms in Japan has been held to 10–11 percent for a decade. The Japanese have made sure that their lucrative market would provide their own companies with a powerful base from which they can enter world competition.

Secretary of Commerce Baldrige has stated "Japanese export policy has as its objective not participation in, but dominance of, world markets * * *." We are seeing the impact of that in semiconductors.

A few weeks ago, a memo was discovered from one Japanese semiconductor firm, Hitachi, to its United States distributors. The memo told them to keep cutting prices by 10 percent until Hitachi wins. It is strong evidence of illegal pricing long suspected of the Japanese in our market. On June 5, I wrote the U.S. Trade Representative asking that he immediately investigate the matter and put a stop to predatory pricing. I have not yet received a substantive response.

Despite a wealth of human talent and natural resources, the United States is losing an intense international competition for jobs and economic security. The Japanese can move with lightning speed to take advantage of market opportunities here, but they demand endless patience when American workers and firms seek to compete in their market. We cannot allow that to continue.

On June 14, the United States semiconductor industry filed a formal action against the Japanese under section 301 of the Trade Act of 1974. The industry's complaint sets forth a very disturbing picture of severe market distorting practices by the Japanese. I hope that in today's hearing, the representatives of the industry will explore the facts in detail.

Although there have been 47 filings under section 301 in the past, the ITC has taken firm action on only two cases. The rest were settled by international negotiation. So our opening witnesses this morning have a vital role to play in this important matter.

I believe that today's hearing should be the beginning of an important series of hearings by the Banking Committee, which has responsibility for U.S. export promotion policies and for the strength of the financial industry. The unfair trade practices that the Japanese have developed are being adopted by a growing number of countries. Those unfair practices frustrate U.S. export promotion efforts and raise new questions about the export promotion policies we should develop for the future. A number of industries deserve this committee's attention. It is my understanding for instance that, just as the Japanese have targeted the semiconductor, telecommunications, robotics, and bioengineering fields, they are also moving in on the financial services industry. While Japanese securities firms for some time have been able to act as lead underwriters and hold seats on our stock exchanges, United States firms have not yet been permitted to do the same in Japan.

I commend you for calling this hearing, Mr. Chairman. I am very glad to be here today to hear the views of these outstanding witnesses on what must be done to develop a new American competitive strategy that will enable U.S. firms to win and remain the locomotive of world economic growth and development.

Mr. Chairman, have you reviewed the Commerce Department's data on last month's trade activity with Japan?

Senator GORTON. I don't think I've seen it, so you go ahead with it if you like.

Senator RIEGLE. I will cite the data here. The June trade figures which were released this morning indicate that the multilateral trade deficit was $13.4 billion. That's the second highest figure in our history, July 1984 having been only slightly higher. Japan's trade surplus with the United States was a record $4.57 billion. For the first half of 1985, the multilateral trade deficit is already $70.7 billion, and we are only halfway through the year. That amount turns out to be more than the entire 1983 deficit. This shows the exponential rate at which the trade deficit is rising.

In the last 2 days, the Japanese have announced plans to improve our trade relations. I think a $50 billion dollar deficit is so severe that any small activity on the margins will not mean very much. The momentum of this deficit is now at the point that we need a very substanial change in the way that goods flow back and forth. I am not sure that minor improvements in access to the Japanese market will mean much by themselves. I think we're going to have to take a careful look at the degree to which they are targeting specific areas in our economy.

I think the problem has more to do with the import invasions we have discussed than with market restrictions in Japan. I know it's popular to cite the lack of market access and the currency differentials as the key to the problem. While they both contribute, the real heart of this problem and the much tougher part to deal with, is the fact that Japan has a focused import strategy to carve out big slices of the American economy. This strategy is being carried out with good products and, in many instances, with predatory pricing as well as with a host of other devices that work to their advantage, by creating unfair trade relationships. These are difficult for us to correct.

In this morning's New York Times, there is an interview with the chief executive officer of Borg-Warner. I would ask to put that in the record because it relates to this topic. The chief executive officer was frank to say that the trade deficit is not a self-correcting problem; we must come up with a new national strategy where business, Government, and labor work more closely together to fashion a strategy that competes more effectively in international markets and to restore our competitiveness. We are not going to be able to correct this deficit any other way. This captain of industry, who is speaking, is very successful in what he does, yet he is quite discouraged that as things stand, we are drifting. We're drifting into deeper and deeper trouble.

[The New York Times article follows:]

Talking Business | with James F. Beré of Borg-Warner

Manufacturing: A Global View

James F. Beré is chairman of the Borg-Warner Corporation. This diversified industrial company, based in Chicago, has suffered from the weakness that grips the nation's manufacturing sector. It produces everything from air-conditioners and auto parts to plastics and turbines, and it had sales of $3.9 billion last year.

Borg-Warner's net income was down in the second quarter. Mr. Beré, like many other manufacturing executives, is concerned about trade problems and his industry's weakness.

What are the causes of the sluggishness in manufacturing?

If you assume the average recovery is 38 or 39 months, we're pretty well into the latter part, so some sluggishness would be expected. I think the main cause is that this is the first time we have had a merchandise trade imbalance to the degree we have. This year it will be close to $150 billion. That can't but weaken the nation's manufacturers.

* * *

Do you think the softness in manufacturing is cyclical? Or is it more than that?

When you look at the weakening of manufacturing, you have to recognize that there is global competition. Many manufacturers' habits were based on the assumption that we were competing just against other American companies.

That has certainly changed. Now we're in global competition, with Japan being the centerpiece. But you can't minimize the role of Taiwan or Korea either. Managers just didn't recognize that this global situation would be as severe as it has been.

The strong dollar has made it more difficult to compete. Some companies have made enormous cost-cutting efforts by infusing capital, automating or making new work-force arrangements. Some have cut costs as much as 25 percent, but that has been wiped out by the appreciation of the dollar.

"We should elevate our trade representative to a position of much more prominence."

But hasn't the dollar's recent decline helped?

It's moving in the right direction. But if you've been losing business because of the strong dollar, a time frame of 60 days is of no value. A lot of the business we lost, we won't get back that fast. The 15 percent drop helps, but it's not going to make a big difference.

* * *

What would you do about the strong dollar?

The dollar is our mechanism for international trade, yet we believe that less than 5 percent of the dollar's movement is related to merchandise trade. The other 95 percent is related to our high interest rates and our nation's stability, both of which attract investment. The dollar has become a means of exchange for the world, but it hasn't created a level playing field for manufacturers.

We have to start addressing international trade mechanisms. We should re-examine the currency changes made at Bretton Woods.

* * *

What is your outlook for the manufacturing sector in the Second half of 1985?

I can speak only for my own company. We don't anticipate any appreciable downturn. Unit production might be about the same, with a slight upturn.

But there's pressure on our margins. Some costs have increased, but we can't pass that on. Our difficulty is learning to run a business in a low-inflation environment. A price increase is not an option.

* * *

How does one run a business in a low-inflation environment?

Our greatest problem with the oil crunch in 1973 was that most of us professional managers had been trained to operate in an uninflationary environment. In the 1950's we found more efficient ways of running our business to keep costs down and increase market share. Then the oil crisis came, and inflation began moving so fast that even if you were efficient you couldn't overcome inflation. So we trained people how to use price increases as an option.

Now we come to a period when inflation and expectations of inflation are whipped. As a result, we're telling our people: "You must find a better way to make your product. You must eliminate layers of management. You must do everything to keep costs down so you can get a reasonable return on investment without increasing prices."

* * *

What do you recommend doing about the nation's economic problems?

We're the only country that doesn't have a strong public private partnership. Philosophically we have had an adversarial role between the two sectors. I think the public sector is ready to talk about this partnership because they see that the trade imbalance is causing enormous dislocations. But the private sector is not ready to talk. They think it would be synonymous with national planning, which they see as being inconsistent with free enterprise.

I disagree. I think you can keep the best of democratic capitalism with a public-private partnership and at the same time you can facilitate fairness in international trade.

We need something like a National Security Council for economics. I think our economic relations are as important as security. I'd start with trade. We should elevate our trade representative to a position of much more prominence.

Steven Greenhouse

UNITED STATES TO BECOME NO. 1 DEBTOR NATION NEXT YEAR

Senator RIEGLE. I would make another point at the outset, Mr. Chairman. When we were here together the other day Paul Volcker was present. If we look at the debt buildup worldwide and if we look now at the fact that we have become a debtor nation for the first time since 1914, the No. 1 debtor nation in the world in fact—surpassing even Brazil and Mexico—and if these trends continue, we will soon owe the rest of the world $1 trillion. That is how deep in the hold we will be if we just stay on today's trend lines. We are in very severe financial trouble internationally because of the way the trade balance is working against us.

In addition to this foreign debt, we have the internal fiscal deficit, which we're apparently not going to resolve. The word from the White House is that the latest budget framework is not acceptable. We are back to square 1, with $200 billion deficits added one on top of another. We have a record high consumer debt: 72 percent of annual income is committed in the form of debt outstanding. The consumer debt or the revolving debt part of our committed income is higher than ever. In addition, the farm loan problem is very severe. There are nearly 1,000 banks that are either in difficulty or on the problem list. The savings and loan industry is having difficulty. There are more and more leverage buyouts where equity is being replaced with debt in the arena of corporate financing.

Adding all this up, one can see we are being pressed against our financial limits. By any standard of prudence, these trend lines have to be reversed. This is an urgent necessity. We ought to meet day and night in order to discuss the effect of the fiscal deficit, the trade deficit, and the accumulated debt buildup on our financial structure.

We are not doing this. We're seeing business as usual. As a matter of fact, the banks are flooding the credit markets with invitations to take on more credit. They're having sales on credit! In almost any paper you look at you're being encouraged to take out a second mortgage on your home. This only adds to the Nation's debt burden.

So I hope that in the testimony you've given today you have left us with some specific suggestions as to what can be done to reverse this trade deficit and to reverse it quickly. Without asking you to review all your testimony, I would be interested in each of you stating, if you will, your sense of what is the single most important thing you think we can do right now to reverse this trade deficit, apart from the budget deficit which we are trying to resolve?

Mr. PRESTOWITZ. I think there are three major aspects of the trade problem, Senator. One is the strength of the dollar. The strength of the dollar is related to the budget deficit, although not entirely dependent upon it. The dollar has been weakening recently and we hope that it will continue to weaken, although we don't want it to crash.

We have been following policies which have reduced interest rates and we expect that that will continue to have a beneficial effect on the dollar.

The second major aspect of a budget deficit or the trade deficit arises from the problem of the debt-ridden less developed countries

[LDC's]. As you know, 2 years ago we had a trade surplus with Mexico of something like $5 or $6 billion. This year we are going to have a deficit with Mexico of $6 or $7 billion. That has nothing to do with the strength of the dollar and it has nothing to do with unfair trade. It simply has to do with the fact that Mexico has got to export and they stopped importing and I believe there is a grave danger as the growth of the United States economy has diminished somewhat concerning the ability of these countries to continue to export and to earn foreign exchange to cover that debt. And one of the things that needs to be done is to persuade the Europeans and particularly the Japanese to step in and to pick up some of that slack and that means in the case of Japan to buy more, to open its markets.

The third piece of the trade deficit is really in East Asia, with Japan as a so-called East Asian fix, Korea, Taiwan and so on, and that problem has partly to do with the dollar and partly with the differential in growth in the United States economy, but a large part of that problem is structural in nature. A large part of it has to do with the fact that we find it much more difficult to sell in those markets than they do to sell in our market and one consequence of that has been that increasingly there's a number of products we don't make. Let's take video tape recorders. We don't make them in the United States and we can put on surcharges and we can get the dollar down and we can do all kinds of things, but we're still going to import all those tape recorders.

Small cars, as you so very well know from Michigan, we don't make a lot of small cars in this country any more. One of the really pernicious aspects of this differential in market access is that ultimately a structure gets built which builds the endemic episode and that's why Jim and I have spent just an enormous amount of time pounding on the Japanese and trying to negotiate agreements that would open those markets, not only in Japan but in Korea and Taiwan and elsewhere as well. So that in industries where we have comparative advantage our companies can sell just as they can when they have comparative advantage here.

TARGETING AND PREDATORY PRICING STRATEGIES

Senator **Riegle**. It seems that this is where we're headed with the semiconductor case that we're discussing today. We are headed in the same direction that we now find ourselves with video recorders. If we're not careful, there will be targeting strategies, predatory pricing strategies and other differences in trade practices which allow a very aggressive trading partner to carve out an area of trade in our economy.

Mr. **Prestowitz**. If we don't get access to the Japanese market, if we don't have the ability to participate in that market in a manner similar to what they have here, the United States industry will be at a continuing disadvantage.

Senator **Riegle**. The point is, however, that even if you have access, you're not necessarily going to be able to sell semiconductors. If they decide they're going to drive down the price of semiconductors to the point that, as a matter of economics, they capture the business, then they can starve out the American producers over a period of time. Why aren't they apt to duplicate in the semiconductor market the success they had in the video recorder market?

Mr. **Prestowitz.** Well, video recorders are a little bit different. We never made them commercially and we are in the semiconductor business. We still have the biggest share of the world market. But I sympathize with some of the points you make that indeed if predatory trade is taking place and if it is allowed to continue, then there's no doubt what the result will be.

Now as you know, we have this section 301 petition before us. There is one dumping case before the Commerce Department. I suspect there might be one or two more in the not too distant future, and we will have to see what steps are taken to determine whether if in fact there is predatory activity and, if so, deal with it.

Senator **Riegle.** How important to the trade problem do you think are the recommendations of President's Commission's reports on competitiveness?

Mr. **Prestowitz.** Well, they are important. The recommendations that the Commission made include a lot of things that would be very beneficial, but as I recall, the Commission did not specifically address the trade issue. As I recall, it talked about the need to get more market access generally. I would have to go back and review it.

Senator **Riegle.** The Commission's recommendations discussed our competitiveness. Presumably, it's the absence of competitiveness that's causing the big trade deficit, but one of the important items in their report was that currency revaluations will not solve this problem. The report was, by the way, unanimous. The 30 people selected by President Reagan were top drawer people representing business, the academic, and labor. The current downward valuation of the dollar will help, but more and more we're not seeing any major changes in trading patterns. Most people now in this business—I'm talking about people who are involved in international trade and make their living in it—say that it will be months or years before we see the effect of the revaluation of the dollar. Even then, the effect will probably be modest. You're nodding yes. Is that your view?

Mr. **Prestowitz.** Well, I think the initial pressure of the downward valuation of the dollar will probably increase the deficit because contracts usually run for 1 or 2 years and as the dollar declines the immediate effect is—you don't break your contracts but in dollar terms the contracts cost more. So for the first year or so you have the so-called J curve which makes the situation worse. But after 1½ years or so, if you have a 1½ or 2 year decline of the dollar, that ought to have some effect. But as I said, the sustained strength of the dollar has led and is leading to an international industrial structure that is beginning to move a fair amount of U.S. production capacity offshore. Once it's offshore, you don't just bring it back because the dollar happens to jiggle a little bit. So it is something that we in the Commerce Department are very, very concerned about.

COMPANIES FINDING THEMSELVES CAPITAL SHORT

Senator RIEGLE. My speaking time is finished. I will finish by saying that I think we're in a situation where we will see some companies and some sectors under attack by what I consider to be predatory trading strategies. These victims are going to find themselves capital short, and increasingly unable to equip themselves with the state-of-the-art technology necessary to compete with very efficient foreign competition. I'm thinking now of plant and equipment, including numerical control machines, and the other productivity enhancing machines that we need to have if we're going to reach the point where only the labor cost component will separate us from other nations. Other nations will still have an edge on us. Right now, companies are being stripped of their capital and they are becoming less and less able to make the major new investments that need to be made to close some of this gap. This is what I saw the President's Commission on Productivity and Competitiveness talking about. They were talking about the need to lower the cost of capital and take the necessary steps to enable us to let some of these companies reposition.

I've watched this cycle in the auto industry. Chrysler would not have survived without the Federal loan guarantee. That's worked out quite well. The Government has made money and the domestic car industry has held a market share that they might not have otherwise held. I'm not saying that the same answer is applicable in other cases. I think we have to look at each case in and of itself. But I've watched what has happened in the auto and related industries and it seems to me that we are about to see large cars come in. The Japanese can, if they want to, drive their market penetration from 23 to 25 percent of domestic sales up to 40 percent, literally in 1 year or 1½ years. They have the economic advantages and the productive capacity which enable them to do that. With the President having backed away from voluntary restraints, we're sitting in a vulnerable position, the other signals we read notwithstanding. It's frustrating when you look at the financial markets today and see the value of the U.S. auto stocks. Despite the fact that we've had a strong recovery and, sales are strong, they're being sold at anywhere from 3 times earnings to 5 times earnings, whereas ordinary company stocks are selling at 9, 10, 11, or 12 times earnings. There's great apprehension in the financial markets about the future of the industrial base of this country, and I don't think we have a strategy to deal with it.

The circumstances bother me, as I know they do Mac Baldrige. I've talked to him about this topic, but I can't find anybody else in the Cabinet who is interested.

Mr. PRESTOWITZ. I work for Mac, so I share his view.

Senator RIEGLE. I do, too. I wish we could find somebody else who did.

Thank you, Mr. Chairman.

Senator GORTON. Thank you. We are very pleased with the contribution you've made. Thank you both very much.

We now have a panel consisting of Mr. Parkinson, Mr. Cornell, Mr. Heimlich, and Dr. Noyce.

Mr. Parkinson, we're going to start with you. So that we may have time to ask questions, I'm going to ask you to limit your opening statements to 5 minutes each. We will include your entire written statements in the record. Mr. Parkinson, welcome.

STATEMENT OF WARD D. PARKINSON, CHAIRMAN OF THE BOARD, MICRON TECHNOLOGY, BOISE, ID

Mr. PARKINSON. Senator, members of the subcommittee, it's an honor to be here today. I certainly appreciate the opportunity to review the topic today which is targeting as it relates to the semiconductor industry.

To begin my prepared remarks I would like to mention that Mr. Grant prepared the position of Micron and we would appreciate it if you would enter that in the record.

Micron Technology started 7 years ago. Four of us that started the company all pledged our houses, life insurance policies, and managed to get the doors open. Three years later we were still in the basement of the dental center. We had 30 people. Three years later we had 1,400 people and had moved to a 5-percent position in the 64K DRAM market.

It's my understanding that the 64K dynamic random access memory [DRAM] market is the one targeted by the Japanese, and certainly I appreciate the opportunity to be here and speak on behalf of the company.

Our company could not raise capital by conventional capital routes. In the early days we helped some farmers develop a sprinker system who later were the source of our funds to move into semiconductor manufacturing. I certainly appreciated the reference to potato chips today.

Considering the comment on beef, more than half of our board are in commodities. I try to understand why they have been a good board for Micron, and I think that's the reason for it. I've certainly heard a number of comments among them regarding beef, their need to rent 747's in order to fly in live beef to Japan because they don't accept frozen. I've also heard the comment that if you ever fly beef to Japan in a 747 you'll never fly people again.

In contrast to Micron, we're competing with large, highly integrated Japanese companies. I drive an American car. I have two beautiful daughters, ages 9 and 10—they check toys to see where they are built before buying. I didn't ask them to do this, but they have noticed in the newspapers and my comments regarding foreign competition and they want to help dad.

PROBLEM OPENING A SALES OFFICE

We have an example to relate about opening a sales office in Japan. One of our original, very responsible people and his wife and five children went to Japan to open a sales office—a big move for Micron. About a month after successfully opening the office and incorporating, he was visited by Japanese officials who reviewed his passport and application. He was asked to leave the country, along with his wife and five children, and reapply for a passport into Japan. This move cost us 1 month right in the middle of starting our sales effort and about $20,000. It was very discouraging to us as a company.

I think the real key to competing with the Japanese and, for that matter any other developed country—certainly I'm not familiar with competing with less developed countries—is that there needs to be a marketing disadvantage for foreign produced goods. There needs to be a marketing advantage for U.S. produced goods. It really is that simple.

In America today, I personally believe there is not, whereas when we sell in Japan, as has been mentioned by the other folks here today, there clearly is a marketing advantage to producing goods in Japan by a Japanese owned company.

My personal recommendation, the duty you're talking for well-developed countries that run large trade balances is well directed, but if you really want to strike at the heart of targeting, take that duty, apply half of it to the national debt, but apply the other half of that duty in support of those companies who are competing in those industries which are the source of these duties. In other words, if the Japanese have 95 percent of the dynamic random access memory [DRAM] market, apply a 25-percent duty to their products, and apply half of that duty in support of those United States companies manufacturing DRAM's here which are directly competing. That would produce a 20 to 1 leverage factor divided by 2 if half of the money goes in support of the national debt. As a businessman I can comment that if I were Japanese, it would give me strong pause before trying to targeting a United States industry for takeover like they have done in DRAM.

I think the other key issue is cultural and that can only be answered by leadership. I think that's what you people represent here today. We need a leadership factor in America which responds directly to this foreign targeting. I think if you all were to talk to your constituents and mention that we as Americans have a problem. We can respond to that problem most directly by simply buying American goods. It's not well understood in America that the source of our strength is the manufacturing sector. The rest of industry, service, marketing of foreign produced goods here, derive from America's purchasing power, which traces to productivity. We need to have increased leadership not just by the Executive and Congress but also by industry and citizens in America. We can provide that leadership. I'm very proud of my children and I am hopeful for their generation, but as was mentioned earlier, we're saddling them with an incredible national debt and now we're saddling them with incredible foreign debt. I think they're going to deal with the problem but I also think we can help them.

The real problem is certainly targeting and its clear success. I say to you today we can negotiate the Japanese. We can posture and threaten the Japanese, but the important thing to do is to act and I mean positively. Today, not tomorrow. Thank you.

[The complete prepared statement and response to Senator Riegle's written questions follow:]

MICRON
TECHNOLOGY, INC
2805 East Columbia Road
Boise, Idaho 83706

TEL. (208) 383-4000
TWX 910-970-5973

November 7, 1985

Senator Donald W. Riegle, Jr.
United States Senate
Washington, D.C. 20510

Dear Senator Riegle:

The following answers are in response to questions in your letter to me dated October 22, 1985.

1. It has been pointed out that the U.S. and Japan have differences in their approaches to corporate financing, in the structure of their capital markets and in the after-tax cost of capital. Some suggest that these differences place capital intensive U.S. firms at a profound competitive disadvantage. I would like to have your evaluation of the nature and importance of these differences.

The Japanese lower cost of capital makes it easier for them to fund capital equipment. The result is that they are able to lower their marginal cost of production and improve consistently quality and reliability through improved capital equipment (such as automation).

2. Panel members described the "keiretsu" as a formidable indirect trade barrier. Could you please describe specific experiences that your company has had with the Keiretsu? What steps do you think could be taken by the U.S. to significantly reduce the influence of that barrier to trade?

The Keiretsu is indeed a formidable indirect trade barrier. The result is that it is difficult for Micron to sell into Japan. The Japanese favor buying locally if a product is available and particularly favor buying from members of the Keiretsu. A specific experience that Micron encountered is when we opened our sales office in Japan, we sent one of our original Micron people, Carl Baker, to run the office. Carl had served on a Mormon mission in Japan and was, therefore, familiar with Japanese customs and language. He proceeded to effectively and aggressively pursue sales in Japan. Carl was visited by the Passport Office, his passport lifted, his visa lifted, and he, his wife, and children were forced to leave the country in the middle of our sales campaign. We believe this was precipitated because Micron competes with member companies of the four key Keiretsu in Japan.

We're building our reputation on innovation

MICRON
TECHNOLOGY, INC

A side benefit of the Keiretsu is the long-term knowledge of the ability to make sales, influencing more confident investments. I do not think the United States can significantly influence this barrier to trade. It is cultural as well as a long standing financial benefit to the member companies. Perhaps we should allow a similar combination in America. At present, banks cannot hold stock in Micron. As a result, when our bank's warrants matured, they sold the warrants rather than retained the stock. Further, I think the combination of AMD, Siemans, Intel, and IBM are representative of steps the United States should take to reduce the competitive advantage of the Japanese Keiretsu.

I have enclosed a copy of my recent article in the "Electronic Engineering Times" which might give you further insight into my feelings on this issue. If you have further questions, please don't hesitate to contact me at Micron.

Regards,

Ward Parkinson

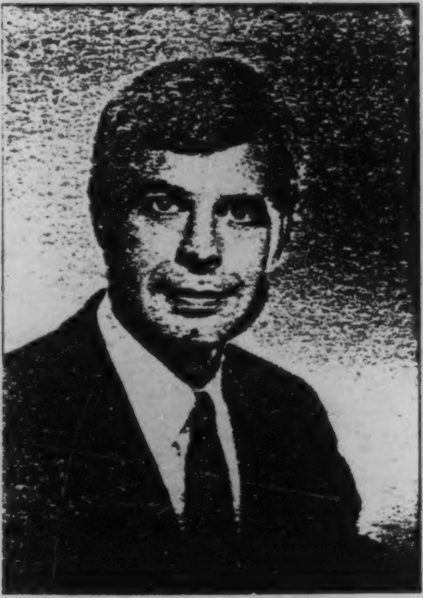
Ward Parkinson

wp/dm

Enclosure

Ward Parkinson On:

Fixing Our Balance Of Trade



Ward Parkinson

Chairman
Micron Technology Inc.

There's no lack of color in Ward Parkinson's family tree. His great-grandfather had seven wives and 42 children; he eventually did hard time in Boise as a result, Parkinson says.

While Parkinson himself has only one wife, the former Susan Tschurgi, he met her under rather unusual circumstances: he was in West Yellowstone, Mont., for "a riot," and had just had his nose broken and his front teeth knocked out. She consoled him with a cup of coffee. (The "riot," it turns out, was his reason for being there. It's an annual Fourth of July event. "We're talking good times," he says.)

In more sedate moments, Parkinson managed to attend Columbia and Utah State before receiving his MSEE from Stanford in 1972. He worked at Fairchild Semiconductor while at Stanford, and later went to Reticon as a systems engineer. Next came stints at Motorola in Mesa, Ariz., and Mostek in Carrollton, Texas, before Parkinson struck out on his own and started Micron Technology in late 1978.

An outdoorsman, Parkinson likes hunting, fishing, tennis and hiking. He and his wife have two daughters, aged 9 and 10.

In recent years, we've been hearing a lot of concern about the national debt. I think we should be even more concerned with our foreign-trade imbalance. The national debt is among friends; it's money that, largely, we owe to our own people. But the imbalance in foreign trade—the result of our buying abroad more than we sell abroad—is a debt owed to people in foreign countries.

When a country has a foreign-trade problem, it normally self-corrects by way of weakening currency. But today we are seeing a different phenomenon. We are suffering large trade imbalances while maintaining a strong dollar. That strength is being sustained by investment from abroad and is working to the detriment of our manufacturers. To reverse the trend, we must insist on a net foreign-trade imbalance of zero. Lowering the interest rate and limiting foreign investment in the United States are two ways to accomplish that goal.

Let's look at what happens. Say we buy a dollar's worth of crude oil from Saudi Arabia. The Saudis have a choice of what to do with that dollar: They can keep it, which will weaken the dollar rapidly and make the dollar in their pocket less valuable; they can buy goods from the United States; or they can invest the dollar in the United States, directly or indirectly.

The fact is that Saudi Arabia is not interested in buying goods that have anything near the value of the goods it sells. So it has no choice but to take the currencies that come into its country and reinvest them in the countries those currencies came from. Otherwise, those currencies will weaken.

Well, we're seeing this increasingly with our major trading partners and it's really injurious to our economy. In the case of Japan, our trade deficit has skyrocketed to more than $70 billion for the first six months of 1985. That's up from about zero five years ago.

Foreign countries have increasingly been investing trade imbalance-generated dollars back into the United States. The Japanese, using the Saudis as a role model, are accelerating their investment of trade-imbalance dollars here. In other words, if we run a trade deficit with them of $50 billion, they deposit $80 billion in organizations such as Bank of America—which strengthens the dollar, making Japanese goods even less expensive in the United States, and the value of the dollars they own even greater.

The effect of this is increasingly to weaken our manufacturing sector, particularly the segment that has a lot of value added and is highly export oriented. And this drives us more and more to becoming a service and raw-materials economy—in effect, a colony of Japan. We'd be very much in the position of the colonies of days gone by.

In their own nation, in contrast, the Japanese are doing all they can to strengthen their own industries with high value-added content and strong export potential. They target industries that have a relatively low raw-materials and energy content and high knowledge content and export potential.

In particular, they're interested in manufacturing industries because they have a large multiplier effect of six or seven. That is, for every manufacturing job they create, they generate six or seven non-manufacturing jobs. The ugly side of this picture is that, for every manufacturing job they take away from the United States, we lose six or seven non-manufacturing jobs. Because a U.S. auto factory closes down, for example, a secretary may not know why she lost her job. However, using her unemployment checks, she buys a Japanese car.

Allowing the dollar to grow weaker would help us remedy this trade imbalance. The best route to that is to lower the interest rate. If the United States raises interest rates, money pours into the U.S., the dollar

strengthens, we buy more foreign goods and the trade balance worsens. If we decide we don't want that investment or those foreign goods as much, we can have lower interest rates and the dollar will return to a more favorable level.

Now, admittedly, interest rates have been falling somewhat in recent months. They're not up where they used to be. But the real interest rate is relatively high compared to inflation, and that's the one that counts. The real interest rate—the interest rate above inflation—has never been higher.

“We are suffering large trade imbalances while maintaining a strong dollar.”

The first thing we must do to attack the problem is to reduce our real interest rates substantially, so that we're no longer as attractive to foreign investment. This is a problem the government must address, probably through the Federal Reserve Board cutting the discount rate which, in turn, would get banks to cut interest rates.

“The fact is, Saudi Arabia is not remotely interested in buying goods that have anything near the value of the goods it is selling.”

Next, we have to insist that the Japanese stop controlling the yen at an artificially low level. That control keeps their goods priced artificially low, which encourages our people to buy more of their RAMs, more of their VCRs, more of their computers and, of course, more of their cars that now have more than $600 in electronics content—up from $25 in 1980.

Next, we have to insist that the Japanese work with us toward a net trade imbalance of zero. This means that we would not permit them to invest their surplus dollars in our banks. We would insist that if we buy more goods from them, then they, in turn, must buy more goods from us.

Well, which goods? This is the sad part. Ten years ago, you could have named 100 types of manufactured goods that Japan would have liked to buy from America. Today, it's different.

One area where Japanese companies can make significant purchases from the Unite States is through NTT, the Nippon Telegraph & Telephone Corp. NTT can buy a lot of telecommunications gear from our manufacturers. But despite promises, NTT has been stalling.

There are other, non-tech things that they can buy. But they'd have to lift some subtle trade barriers.

Look at beef, for example. If I want to export beef to Japan, I have to send it live weight. That means I have to buy space on a 747. That's going to be expensive, because once you've flown beef in a 747, you'll never fly people in it again.

When you ship beef to Japan live weight, by the time it hits the Japanese table, the purchase price is around $50 a pound. If the beef were sent frozen, its cost would be comparable to what it is in the United States.

The Japanese pretend their trade barriers aren't real. They say, "Sure, you can send in beef if you meet our requirements." But that particular barrier is real, and we should try to motivate the Japanese to remove it and others like it.

“This drives us more and more to become a service and raw-materials economy; in effect, a colony of Japan.”

Similar markets could be there for potatoes, french fries, strawberries, tomatoes, ketchup. The list goes on. These are simple examples.

Well, will we help the semiconductor manufacturers and computer manufacturers and other high-tech manufacturers by selling beef or potatoes to Japan? You bet. By boosting these sales, we help develop a more realistic dollar, which would make our high-tech products more affordable and more attractive in world markets.

The Japanese government's trade barriers penalize Japanese consumers. But they strengthen the Japanese economy against ours. Those barriers are a key element in our trade imbalance—but not the only element. There's a cultural element as well.

One reason corporations in Japan don't buy more foreign goods is an extension of why individuals don't buy them. The individual in Japan is raised with the concept that he's at war with the world from a trade standpoint. It's pounded into him that "we've got no raw resources; we've must reduce imports and boost exports or die."

So the same individuals who religiously buy Japanese as individuals go to work for a corporation. And some of them are in purchasing and management functions. And they reflect the same biases as corporations that they do as individuals.

Well, there's no reason we can't imbue our people with similar attitudes. We can go to the American people with a plea to buy American. President Reagan, for example, could get up before the American people and say: "We've been talking about the national deficit; now let's talk about the imbalance in foreign trade."

He could urge Americans to favor the products of U.S. manufacturers. Such a plea might do more than legislation to help our foreign-trade balance.

I recently testified before the Senate that narrow duties—those aimed at specific industries—can't work because they penalize U.S. industries that don't have duty protection, and encourage the Japanese to target the non-protected industries. And broad duties, by themselves, will not discourage targeting—Japan's most deadly weapon. But we can make broad duties work. We can apply broad duties and redistribute half the duties to American competitors, by product, in proportion to sales of that product.

“We have to insist that the Japanese stop controlling the yen at an artificially low level.”

“We should not permit the Japanese to invest their surplus dollars in our banks. We should insist that if we buy more goods from them, then they, in turn, must buy more goods from us.”

If Japan has, say, a 5-percent market share in the United States in a particular product line, the effect of the broad duty would be small because there wouldn't be much collected and the sums distributed to U.S. competitors wouldn't be significant.

If, on the other hand, it has, say, a 96-percent market share, the effect of duty distributed among U.S. competitors would drive down Japan's competitive advantage in that product. Half of the duty would be distributed to U.S. manufacturers of the product that generated the duty, which could strengthen the U.S. manufacturers in that product area.

Let's look at the extreme case where, say, Japan has 100 percent of the market for a particular product, for instance, megabit DRAMs. In this case, we could distribute the half-duty revenue to fund research in megabit DRAMs or the funds could be reserved for future U.S. manufacturers of megabit DRAMs. This program would meet a bullet—targeting—with a bullet.

“Will we help the semiconductor manufacturers and computer manufacturers and other high-tech manufacturers by selling beef or potatoes to Japan? You bet.”

I believe that if we implemented strategies like these, we would see the price of the yen double. Then it would become more appealing to invest American dollars in America—say, to make VCRs.

If we invested American capital in the United States instead of using our money to buy foreign goods, and if the Japanese yen were running twice what it is right now, American manufacturers could sell more abroad, and they could become profitable manufacturers of products they don't now make—like VCRs. That would build American employment and prosperity. **EET**

Testimony of

Larry L. Grant
Counsel
Micron Technology, Inc.
Boise, Idaho

GENTLEMEN:

My name is Larry Grant. I am counsel to Micron Technology, Inc., a semiconductor manufacturer located in Boise, Idaho.

At our facilities in Idaho, the company designs, manufactures and markets dynamic random access memory components, known as DRAMs, the most widely-used semiconductor component in computer systems. The plant includes design, wafer fabrication, test and assembly facilities. Although initially dependent on off-shore subcontractor assembly, the company has continually worked toward transfer of assembly of its products to our Boise location. By the end of 1984, substantially all of the assembly of our product was being completed in the United States. The company was founded in 1978 and shipped its first DRAMs in 1981. Micron is a merchant manufacturer, meaning that we sell our product on the open market rather than producing it for our own use.

Based on estimates from Dataquest, a California based research firm, the world market for DRAMs exceeded 3 1/2 billion dollars last year. More than 70% of that amount, or roughly 2.4 billion dollars, were sales of what are known as NMOS 64K DRAMs which has been the primary product of Micron in the past. Despite current industry conditions, it is still expected that the market for DRAMs will double by the end of this decade. At the end of 1984 it was estimated that U.S. manufacturers held approximately a 37% share of the world market, Japanese manufacturers accounted for approximately 58% of the market, European manufacturers for approximately 4% and the rest of the world for less than 1%.

The names of our Japanese competitors in this field are well-known, world-wide conglomerates such as Hitachi, Fujitsu, NEC, Toshiba, Mitsubishi, Matsushita and Oki. Each of these competitors is a "quasi-captive," meaning that they produce semiconductors both for their own internal use as well as for sale on the open market to others.

1984 was a record year for the DRAM industry. It is estimated that shipments increased for the industry by at least 40% over 1983. By mid-year, we were operating at nearly full capacity and the entire market appeared to be suffering from a shortage of product. Pricing, however, was a concern. By September, we felt that, based on historical levels, pricing of 64K DRAMs was too high. Anticipating a necessary downward adjustment in the market, Micron announced in September, 1984, a price decrease to the $1.85-$1.95 level for customers interested in entering into long-term, scheduled delivery contracts. By December, 1984, we had booked our anticipated capacity through 1985.

The new price level we established was reasonable at the time. Even if the industry determined to follow our lead, the customer would benefit from the reduced price level and we would maintain profitability through our introduction of the next generation of DRAMs, the 256K, which we anticipated would occur in the last half of 1985. In early 1985, however, we began to receive calls from customers concerning our price levels with an increased indication that pricing on the open market had dropped well below our contract price. With reports of market prices of less than a $1.00 by March, we had no choice but to renegotiate prices with a substantial number of customers. I was involved with the renegotiations of the contracts with major customers. In a many of those cases, the customer involved indicated that the necessity for price renegotiation arose because of the ready availability of Japanese product at lower prices and more favorable payment terms.

There is no doubt that the entire semiconductor and computer industry has suffered a downturn in the last six months. This downturn would certainly explain some cancellations, reschedulings and price reductions. It does not, however, explain the extremely low prices of DRAMs which the industry is experiencing. Current prices of the 64K DRAM are in the $.50 - $.60 per part range, well below any estimated cost of production of any major manufacturer, American or Japanese.

Given the confidentiality which pervades the industry, it may be some time before meaningful data becomes public which will explain current market conditions. We believe, however, when the statistics are in there are at least three factors present in the current market which are directly related to Japanese targeting of the market and at least partially responsible for the current state of the U.S. industry.

The first factor is pricing as it relates to market share. DRAM technology has generally advanced by a factor of four. Commercial production of the 1K DRAM began in 1971, the 4K DRAM in 1973, the 16K DRAM in 1976 and the 64K DRAM in 1979. We are now experiencing the early stages of transition to the next generation, the 256K DRAM. Historically, the change over from one generation to the next begins to occur when the price of the new product comes within four to five times the price of the old product.

At the end of the 16K DRAM cycle, Japanese manufacturers held approximately 40% of the world DRAM market. As is documented in the 1983 study by the Semiconductor Industry Association on Japanese targeting of the industry, on their introduction of the 64K DRAMs into the U.S. market in the early 1980's, the Japanese undercut U.S. pricing in order to gain market share. As a result, in the transition from the 16K DRAM to the 64K DRAM, the Japanese increased their world share of the market to nearly 70%.

The market is now approaching the transition from the 64K to the 256K DRAM. With almost no competition from anyone, reported prices of Japanese 256K DRAMs have dropped from approximately $16.00 last fall to current prices of less than $4.00. Given reduced revenues on 64K DRAMs and a low price structure on 256K DRAMs, the transition to 256K DRAM manufacture will be difficult for U.S. producers. At least one, National Semiconductor, has publicly announced it does not intend to enter the 256K market because of current pricing structures. If U.S. producers cannot profitably continue in DRAM production, the market will necessarily shift to Japanese producers who are already poised with substantial 256K capacity. It appears to be a very real possibility that when this generational change is complete, Japanese manufacturers may have captured as much as 90% of world DRAM market.

The second factor present in the market is Japanese capacity. It is well documented that as a result of targeting, the Japanese built, and have continually expanded, their manufacturing facilities at levels beyond those necessary to provide product to their home market. Given dependence on an export market for utilization of capacity, any reduction in growth in the market must necessarily meet with Japanese oversupply. While virtually every United States manufacturer has announced layoffs and cutbacks, the Japanese seem more concerned with meeting production quotas and maintaining employment, regardless of oversupply or other market conditions. As a result, continued production and expansion by Japanese manufacturers can only mean more excess supply and further losses for the entire industry.

The third factor is the isolation of the Japanese market. Unquestionably, Japan is the second largest market for semiconductors after the United States. Micron opened a sales office in Japan last year. Sales have been virtually nonexistent and, even when we are successful in getting a prospective customer's attention, we have been faced with continual rounds of qualifications and testing.

We have also been faced with Japanese pricing in Japan. Our September, 1984, price reduction would have allowed us to ship and deliver product to Japanese customers at the then prevailing price in the Japanese market. Almost immediately on our announcement, Japanese prices began falling and have continued to fall as fast or faster than U.S. prices. Apparently, by the price decreases, the Japanese decided to avoid competition from outsiders in their own market as well as avoid charges of selling product in the United States at prices lower than those in Japan.

Given their willingness to sacrifice profitability for market share, their dependence on exports for utilization of capacity and their current control of almost 60% of the market, there seems little doubt the Japanese have determined to structure pricing and increase capacities to any point necessary to eliminate any real competition in the market in the long run. Of course, such a policy necessarily results in increased trade friction. As such friction increases, the final stage in targeting appears to be to move their factories to the United States. It seems ironic that at the same time other U. S. manufacturers have turned to off-shore assembly to reduce costs, the Japanese are building assembly and other facilities in the United States. Every major Japanese manufacturer is already operating some kind of semiconductor facility in the United States and some are now announcing openings or construction of new wafer fabrication plants. The end result, of course, is displacement of the U.S. industry and capital by Japanese manufacturers and capital.

Micron Technology is committed to the DRAM market. We believe we are, and will be, as competitive as any other manufacturer in the world. We are not afraid of competition. In fact, we welcome it. What we do not welcome is policies by the Japanese which appear deliberately designed to destroy U. S. manufacturers by reason of lost profits, impairment of capital and restricted entry into new products, particularly when the Japanese market has been inaccessible to us.

Senator GORTON. Thank you.
Mr. Cornell.

STATEMENT OF JONATHAN E. CORNELL, SENIOR VICE PRESIDENT, SECTOR EXECUTIVE, HARRIS SEMICONDUCTOR SECTOR, MELBOURNE, FL

Mr. CORNELL. I thank you, Mr. Chairman, for the opportunity to testify before your committee. I am a senior vice president of Harris Corp. Harris is a producer of electronic products and semiconductors for the worldwide information technology market with sales of about $2 billion employing about 30,000 people in the United States, Europe, and Asia. I am responsible directly for the Harris Semiconductor Sector which is a manufacturer of semiconductors and products with sales of about a quarter of a billion dollars a year with about 5,600 employees.

We have subsidiaries, in addition to our factories in the United States, in Europe, Japan, Malaysia, and we have a joint venture in Europe in semiconductors, so we are quite experienced in both domestic and international markets.

I have submitted a complete text of the views of my company on the matter of the international trade crisis, but in the interest of time I'd like to relate the experiences of Harris Semiconductor in an attempt to participate in the Japanese market and to summarize my views and recommendations on this subject.

STRUCTURED AND EXCLUSIONARY NATURE OF JAPANESE MARKET

Our experience in Japan provides a clear and conclusive example of the structured and exclusionary nature of the Japanese semiconductor market. Specifically, it shows that where there is no Japanese source for a product that we manufacture we enjoy substantial and consistently growing business. The quality, pricing, and delivery of products is consistent with those that we deliver on a worldwide basis and the kinds of relationships and problems we have with our customers are no better or worse than we experience in the rest of the world.

However, where there is a competitive Japanese product, we are excluded from doing any business at all, except when there's a product shortage. For example, in early 1984 we received substantial orders from a leading Japanese computer manufacturer to provide items which we had been unable to sell for the prior several years after a Japanese source had entered the market. Subsequently, that Japanese supplier was again able to service the demand with that customer in Japan and we received no further business at all.

During this period of unprecedented demand in the marketplace Harris and I believe most other United States companies made an effort to allocate very scarce product into our Japanese customers in these periods of short supply as well as normal times with the idea being of assuring a source of supply to these customers in this difficult period.

Now during the period of scarcity of product, our sales in Japan increased from about 3 to 6 percent. Since that period, when the supply caught up with the demand, our sales have returned to historic levels of about 4 percent.

Now I believe that these statistics represent the general experience of United States companies in that marketplace and certainly support the conclusions that are reached in the Semiconductor Industry Association's [SIA] section 301 petition, namely, that we are structurally excluded from the Japanese marketplace except for products not produced by Japanese sources or at least at best are relegated to the position of a residual supplier during periods of short supply.

Now to put this in a quantitative perspective, I have developed a model that's based on industry data for sales in 1984 which would suggest that semiconductor suppliers on a worldwide basis realized about 70 percent of their sales domestically and the remaining 30 percent through export. Now this model would predict a 28-percent United States share of the Japanese market which compares in fact to a share of about 11 percent, a considerable disparity. Conversely, the same model would predict a 16-percent Japanese share of the United States market which is quite close to the share that they actually hold.

Now from this logic I conclude that the United States market provides equitable access to both United States and Japanese suppliers, but the Japanese market is unreasonably biased in favor of domestic producers. For the United States industry to be denied access of one-third of the world market while our principal competitors in Japan operate in a protective home base and have open access to the U.S. market places our industry at a competitive disadvantage which could in the long run prove to be fatal.

CONTINUED EXPANSION OF PRODUCTION CAPACITY BY JAPAN

Now the problem, as mentioned earlier, there is continued expansion of production capacity by Japanese companies of about $3 billion of capital expenditures annually which is beyond even the most optimistic of our forecast amd shows that this will inevitably result in predatory pricing in the United States markets and further exacerbate the situation. Now this opens up other questions with regard to the problem of capital access which I'm not prepared to speak to. The point I would make is that time is running out for our industries. We must see a meaningful, measurable and long-term correction to the Japanese approach to semiconductor trade and we must see it in the near term.

Specifically, I think we should ask ourselves what measures are required to remedy the situation of unbalanced access to the United States and Japanese semiconductor markets. Clearly, there are two approaches here. One, an increased access to the Japanese market for United States suppliers; or the second, restricted access of the United States market for Japanese suppliers. Regarding the first, I think Japan in the form of Government and half a dozen or so semiconductor users must be simply tasked for increased purchases of United States semiconductors. The measurement of success should be a market share of 25 or 30 percent.

Short of this objective, which I personally think is best but would take considerable time, I see no alternative in the short term other than to restrict access to the U.S. market as the only available means to a reasonable market equity, particularly in the short term.

Specifically, we must consider all the options available in this regard which include some form of import surcharges, import quotas, import consumption tax, new trade agreements and in increased authority for the USTR. Some combination of these actions which I believe should be time-phased to consider both short- and long-term implications must be developed. I would emphasize however that beyond specific actions chosen, it is of the utmost importance that the decision and implementation occur swiftly and decisively.

I would close with reference to the words of Mr. George M. Kenyon from his book, "Life of Reason": "Those who cannot remember the past are condemned to repeat it." We have a history with steel, automobiles, and the electronics industry in this country and I contend that you must not permit the semiconductor industry and ultimately the electronic industry to join that. We don't seek protection. Rather, we seek fair and balanced trade market access.

I thank you, Mr. Chairman, and the committee for the opportunity to speak to this issue.

[The complete prepared statement follows:]

July 30, 1985

STATEMENT OF JON E. CORNELL
BEFORE THE
COMMITTEE ON BANKING, HOUSING AND URBAN AFFAIRS
UNITED STATES SENATE
JULY 30, 1985

Thank you Mr. Chairman, I am Jon E. Cornell, Senior Vice President, Semiconductor Sector of Harris Corporation. Harris Corporation is a producer of advanced information processing, communication and microelectronic products for the worldwide information technology market. The company's products, systems, networks and components are sold in more than 100 nations of the world. In fiscal 1984, Harris had sales of $2.0 billion, employed 30,000 people and operated 35 plants in the United States, Canada, Europe and Asia.

Harris Semiconductor is a major United States manufacturer of integrated circuits and semiconductor products with annual sales in excess of a quarter of a billion dollars and having 5,600 employees. We have a subsidiary established for selling in Japan, a fabrication facility in Malaysia, and are partners in a joint venture in France.

For the first time in modern history, the United States has a serious competitive problem in international trade, not only as to exports but more and more relating to the American domestic market. Our primary international competitors are no longer limited to European companies. Today, the real competition comes from

Asian countries, with Japan as the leader, but with rapidly developing competition from other Asian nations.

The current extreme problem with international trade has been recognized in the Congress and by leaders of both business and labor. Unfortunately, academic leaders, financial specialists and economists seem not to appreciate or understand the realities of the situation and the almost inevitable results of current trends in international trade. We sincerely appreciate the recognition by the members of the Senate Banking Committee of the seriousness of this issue. This problem is no longer limited to smokestack industries and consumer products but has recently moved to include high technology electronics, including semiconductors.

Discussion in recent years has appeared to focus upon a variety of claimed causes for our current international trade problems. In some cases, it has been fashionable to avoid any implication that governmental policies and trade restrictions adopted by other nations might be a significant, if not a primary, cause of the current unbalance in international trade. The talk has been of exchange rates and the high dollar value, disparity in labor rates and failures of U.S. management. It is very dangerous, however, to explain away the entire problem by concentrating on these individual issues, however important they may be. Instead, we must understand the nature of the United States capitalistic free enterprise system and our governmental and social policies as compared with those of the competitor nations and recognize that significant and probably permanent changes have occurred which seem not to be fully recognized in all circles of government.

U.S. industry is based upon a market-oriented privately-owned capitalistic system and has been focused on our domestic economy, with attempts in recent years to achieve re-distribution of income through transfer entitlement programs. The system has been very successful. History has proven that we get better economic results through the collective judgment of the market system than is possible through governmental planning and regulation. The principle of freedom of trade is an integral part of this system. As compared to Europe, which has lost jobs in the last four or five years, our country has created more new jobs per capita in the last few years than any other major country in the world, including Japan.

However, we are now facing a new type of competition. Japan and the Asian capitalistic democracies have successfully adopted our market-oriented privately-owned capitalistic system, but they also focus on growth, productivity, external competitiveness and job security. Compared with us, they have a less costly social system, markedly lower wage rates, lower exchange rates, higher savings rates and lower cost of capital. Those of us who have been in competition directly with Japanese companies can testify that they are formidable competitors indeed.

Let me illustrate the potency of the Asian approach with a recent incident. Turkey let a contract for a bridge across the Straights. A U.K. consortium assumed that it was going to win the contract because it had built the first bridge. When the bids were opened, a Japanese firm bid $576 million vs. $650 million from the U.K. consortium, and if that was not enough, the Japanese offered to finance the bridge for 25 years at 5%. As will be understood here, a U.S. company could never have matched any such financing. We believe that if Japan had governmental and economic policies such as ours, no Japanese company could do it either.

It is frequently said that the problem is the fault of the American companies, their excess costs or their out-of-date management. Although this may sometimes be true, it is not the full answer. Harris Corporation has been successful in direct competition with Japanese companies for many years in many countries throughout the world. In contrast, it appears clear that there is a special sort of situation involved when we try to sell into the Japanese market, or even when Japanese industry invades the American market to compete with us here. The history of the semiconductor industry, particularly, demonstrates that American companies are fully able to compete in a fair arena. For example, excluding the American domestic and the Japanese home markets, and concentrating on the rest of the world where competitive conditions are more or less equal between Japanese and American companies, the best available figures from the Semiconductor

Industry Association show that American companies have 55% of the European market, and the Japanese have only 12%. If we can compete in Europe, why should we lose out in Japan if we get equal treatment? Yet, in Japan, the Semiconductor Industry Association's statistics show that American semiconductor companies are limited to only 10%-12% of the market. On this basis, I can assure you that the problems in international trade with Japan cannot be explained away with the easy answers we sometimes hear.

It is true that we need to concentrate on more effective management, better use of labor and other matters which are reasonably within the control of business management. In our industry, most companies appear to be doing this. At the same time, this nation must recognize that we have many outdated national policies, and particularly that governmental attitudes in the United States are drastically different from those of foreign nations. In the United States we have frequent antagonism between the governmental and business sectors, minimal support for exporters, a lackadaisical attitude by diplomatic officials of the American government throughout the world with respect to business matters and a frequent encouragement of, and praise for, importers, all coupled with an often-expressed belief that international trade is not all that important. Our laws, policies and procedures have been developed primarily for a domestic economy. Until the last two or three years, the antitrust laws were applied as if there were no foreign competition for most products. The tax policy is based almost entirely on the domestic economy, revenue raising and social issues, treating the

United States as a distinct and separate economy and social system. Social legislation and regulations are predicated upon the same assumptions.

Also, apparently it is assumed that foreign nations and their governments have the same attitudes and objectives and have the same beliefs in free trade as we do. Americans believe this because, apparently, foreign officials frequently tell us so. We who are engaged in international competition believe otherwise. In contrast to American governmental policies and the attitudes of American academicians, economists, and many policymakers here, in most nations the government and business work actively and cooperatively to develop their internal industry. They make exports a primary objective. The United States market is the inevitable target for that policy, and American industries, companies and workers are the inevitable victims. Restriction of imports by the foreign country is likely to be an essential concomitant of that policy.

With respect to Japan, the essential facts have been developed by the Semiconductor Industry Association to the best of its ability and have been set forth in a petition filed under Section 301 of the Trade Act of 1974, a copy of which has been made available to this Committee. I will not attempt to outline those facts which we believe demonstrate that we are not playing by the same rules on our side of the Pacific as they do on the other side. We can see from the market statistics offered, which compare the United States market and the rest of the world, that there is something different about the Japanese market which cannot be explained by the oft-repeated rationales about the quality of Japanese industry in general.

The facts show that American companies dominated the semiconductor industry throughout the world 20 years ago and were predominant suppliers in Japan. At the same time, by specific government regulation, investment in plants and creation of subsidiaries in Japan by American semiconductor companies was specifically prohibited and allowed only occasionally on only very restricted terms. This was true until the Japanese semiconductor industry developed its technology through cooperative arrangements between companies, with active participation of the government of Japan. The Japanese claim that the restrictions have been removed, but whether they have or not really is irrelevant. The restrictive market structure has already been created, and market access is still significantly curtailed.

It is our view that American companies should not be required to go to a court of law or to initiate anti-dumping cases and prove the specific reason, or to name the specific government degree, or to designate a specific company which did a specific act to produce these results. In the United States, in comparable circumstances, the United States government will conduct antitrust investigations and other governmental inquiries into the activities of the United States companies, with full powers of investigation, and this is done upon complaints filed by foreign companies and citizens, as well as on domestic complaints.

Private litigants have the opportunity to go to court to use discovery proceedings to obtain the facts, and our courts are freely open to foreigners.

The semiconductor industry has no similar ability to obtain facts in Japan, and we fear that governmental procedures are, for the most part, inadequate to obtain facts relating to foreign business activities of a type which could be found and utilized by the United States government here. It is our belief, therefore, that United States governmental policies and attitudes toward foreign trade practices must be altered significantly if we are to have free international trade of the sort which we Americans have a right to expect as the price for free entry by foreign companies into our markets.

I would like to cite some actual experience that Harris Semiconductor has had concerning doing business in Japan and competition with Japanese companies. Harris Semiconductor has been selling into the Japanese market at least since 1970 has had a branch office or marketing subsidiary there since 1974.

Harris Semiconductor is the 10th largest producer of integrated circuits in the U.S. We do not participate in the discrete component portion of the semiconductor marketplace, but sell integrated circuits and microprocessors which include large numbers of semiconductor devices. In addition, we pursue a technology-based marketing strategy that results in a higher percentage of proprietary or differentiated products in our portfolio than is typical of most other semiconductor companies. As a result of this particular strategy, our experience in the Japanese market provides clear and conclusive examples of the structured and exclusionary nature of the Japanese semiconductor market.

Where there is no Japanese source for a circuit we manufacture, we enjoy substantial, consistent, and a growing business. The quality, pricing, and delivery of these products is consistent with that which we deliver on a worldwide basis, and the level of customer problems we encounter is no greater or less than we experience in the United States or Europe where we compete directly with Japanese producers. It cannot be said, therefore, that pricing, quality and delivery are the limiting factors in our sales to Japan.

Where there is a competitive Japanese product, we generally are excluded from doing any business at all in Japan, except when there is a product shortage, as occurred in early 1984. At that time we received substantial orders from a leading Japanese computer manufacturer on a part we had been unable to sell them for the prior three years. We had originally sold this part, a bipolar PROM, in Japan, but sales virtually ceased when a Japanese source entered the market. Subsequent to the orders we received in early 1984, the Japanese source was able to meet the customer's delivery requirements and we have received no further business. During this period of unprecedented worldwide demand for semiconductors, Harris, and most of the semiconductor industry, overallocated scarce product to the Japanese market in order to insure our position as a dependable supplier to Japanese customers in periods of short supply, as well as in normal times. During this period, Harris' sales in Japan increased to approximately 6% of worldwide sales from the typical 4% which we have experienced. We intensified our marketing efforts in Japan during this period and converted our branch office into a subsidiary corporation with an increase in staff. Nevertheless, since that boom period, our sales have returned to historic levels and are currently running slightly under 4% of Harris' total sales.

Our experience parallels the conclusions reached in the Semiconductor Industry Association's 301 petition; namely, that we are structurally excluded from the Japanese marketplace, except for products not produced by a Japanese source or as a residual supplier during periods of short supply.

The clear exclusion of my company and our industry from the Japanese market could very well be fatal for the industry and also bears implications which go far beyond the revenue denied to us.

The semiconductor industry is among the most capital intensive in the world. It now takes approximately $1.00 of capital investment to generate a dollar of incremental sales. For any company, be it U.S., European or Japanese, to compete and grow requires equal access to the worldwide market.

Japan currently represents 35% of the world semiconductor market, and consumption is growing at a faster rate than in the United States. For the U.S.-based semiconductor industry to be denied access to one third of the world market, while its principal competitor (Japan) operates from a protected home base and has open access to the U.S. market, places our industry at a competitive disadvantage which, in the long run, could prove fatal to the industry.

It is here that the impact of our industry's viability extends to the overall electronics sector and the industrial base that they serve. Our products are the building blocks for the computer and information technology companies, as well as the components which are critical to our electronics-based defense systems. The demise of the U.S. semiconductor industry would foretell the ultimate transition of the American electronics industry to second-class competitive status. It is our customer's products and technology which will, to a large extent, determine whether our automotive and so called "Smokestack" industries can return to positions of worldwide competitiveness through automation and improved productivity.

Compounding the problem is the continued expansion of production capacity by the Japanese companies beyond even the most optimistic of market demand projections. This irrational capacity expansion must inevitably result in the dumping of huge volumes of product at predatory prices into the U.S. market, further exacerbating the situation.

Time is passing and the hourglass is running for our semiconductor industry. This industry has led us into the information age. We are competitive on a worldwide basis. Our industry has consistently lowered its price per function at least 20% per year since its inception. We have not sought protection in our home market and we support the market access negotiations now underway as a result of U.S.T.R.'s acceptance of S.I.A.'s 301 Petition. We must, however, see a meaningful, measurable, and long-term correction of the Japanese approach to semiconductor trade, and we must see it in the near term. I urge you to consider the statement of George Santayana from his book Life of Reason..."Those who cannot remember the past are condemned to repeat it." We have the history of the steel, automotive, and consumer electronics industry in this country, and I contend that you must not permit the semiconductor industry, and ultimately the electronics industry, to join that sad litany.

Also, this nation must sometime make it clear to foreign governments, and also to our own businesses and investors, that America will no longer tolerate this pattern of activity. Otherwise, it will spread from industry to industry and be repeated by foreign nation after foreign nation. Restrictive import practices are not limited to Japan, and they will be copied and extended by other nations if they are allowed to succeed.

The pattern demonstrated by our Japanese experience is that their markets are not fr and they use that protected base, plus technology which first came from America, to target our home markets. We respectfully point out that not only Japan but also Asi democracies reap the benefits of American technology and the output of American engineering schools. They can send their brightest students to the United States fo an education and for training in American companies. They can then devote the full resources of their society to development of both products and technology within targeted industries, and they can protect those industries in their domestic markets while they learn and mature. They can then unleash them on the American market with full support of the local government and the local financial institutions. This will be done taking full advantage of their lower labor costs and their lower expenditure for social, environmental and other purposes. They will frequently have a tax syste which under the GATT system is fully legal, such as a value added tax where imports bear full tax, and exports obtain a full tax refund. Being smaller than ours, their internal markets can be protected by a variety of devices, both governmental and private, such as procurement specifications and safety standards, as well as by the peculiarities of their domestic distribution system and so-called cultural preferenc and other factors.

To cope with this situation, an American company may be able to find solutions not available for the nation as a whole and our workers. The American company must inevitably remove a major portion of its manufacturing offshore to take advantages of the local opportunities there, allowing low cost manufacturing there and access to that domestic market. Harris Corporation has not been a leader in this strategy, however we face the problem. As a minimum, the American company will exert every effort to maintain control in the United States of product development through research, education and productivity, but in order to survive, we necessarily will manufacture wherever necessary. This or some similar business strategy will be available for most manufacturing corporations.

The future problem may not be limited to manufacturing if current trends continue. As stated earlier, today you can go to Taiwan, Korea or Japan and you can hire U.S. educated engineers who have gone to school at our greatest universities and who have worked in some of our better companies. They will have the capacity to continue the transfer of scientific knowledge from here to there. Even in Japan, they work at about half the cost of engineers in the United States. If our nation goes along on the present route, Japan and these Asian nations will be developing the new products and forming the new companies in high tech industries.

Many commentators have pointed to increased job creation in the United States and growth of service industries. They see no problem in current trends. Some say we will just move to a higher technology when the business of current high technology industries has gone to Asia. Others say, "We'll just move further into the service-oriented industries." We are already doing this. Over the last two or three years, during the rapid growth in our GNP, almost all the new jobs

have been formed in service industries. How far can this go? Responsible bodies of opinion, including the Young Commission, emphasize that if we are to maintain our world leadership, we must have a strong viable and diversified manufacturing industry. We question if this nation can maintain our position and our standard of living in a predominantly service economy.

Harris Corporation urges that the Congress recognize the problem and also recognize that it is growing worse. We sincerely believe that we are not competing on equal terms with these foreign competitors. We are convinced that their market is not truly open to us in the same way that ours is open to them. We know of specific foreign governmental actions which have been designed to produce this result, and we believe that foreign competitors cooperate and reach agreements of a type which would not be legal if done here by U.S. companies. We believe it is time for the U.S. government to, first, recognize the problem; second, place it at the top of our national priorities; third, investigate the facts, with the seriousness and with the same thoroughness as would be done in an investigation of a domestic industry; and, fourth, take some effective action.

Sometimes we are asked to offer suggestions as to specifically what our government can do and should do, and what we should ask the Japanese to do. This reminds us of 1981 and 1982, when the semiconductor industry first suffered tangible effects in U.S. markets from Japanese targeting. This was when we first brought to our government's attention the facts concerning a virtually closed Japanese market for semiconductors. At that time, American pressure produced what appeared to be an affirmative Japanese response. A High Tech Working Group was set up, representing jointly both the government and industry on both the

American and Japanese side. Many meetings were held, and American companies intensified their efforts in Japan. In the case of Harris Corporation, as said earlier, we converted our branch office to a Japanese subsidiary for marketing purposes and increased the marketing staff and marketing efforts in Japan, and we received one large order. Japanese companies stated then that they were buying from American semiconductor companies and would increase such purchases.

Unfortunately, it is now clear that all those efforts were for naught. American penetration in the Japanese market is almost the same now as it was before that effort—something in the order of 10% or 12%. The increased Japanese purchases came at a time of worldwide shortage of semiconductor devices—a seller's market for semiconductor manufacturers. Other American semiconductor companies followed virtually the same practices as we at Harris did and attempted to penetrate the Japanese market by allocating scarce products to the new Japanese customers as if they were our established American customers. American companies could sell as much as they could produce, and Japanese purchases from the United States industry in this environment increased to some extent for a brief period of time. Now, as you know, the semiconductor industry is in a major recession, and the Japanese have reverted to their pre-existing sources of supply. At the same time, they have been increasing drastically their sales into the United States at ever lower prices.

We now suggest, as a first step, serious prosecution by the United States Government of the 301 petition of the Semiconductor Industry Association. The objective of that petition is to open the Japanese market. We have been asked sometimes to specify what action the Japanese government should or can take to open their market. We do not believe our government should attempt to suggest any specific action for Japan. Because the Japanese state that we do not understand their customs, their laws and their market, we should take them at their word. Rather than make specific complaints or offer specific suggestions, we should state emphatically our goal, which is the opening of the Japanese market, and tell them that our standard for success in meeting that goal is an increased share in their market by American companies commensurate with our competitive abilities, as evidenced in worldwide markets. As long as we allow the Japanese to enter our markets freely, we should make it clear what results are required in their market. We are talking about some specific market share number, not any generalities, because market share is a clear method to measure results. We should leave it to them to analyze their problems and decide in their own way how to bring about the stated result. We should not equivocate as to what that result must be.

Turning to suggestions for action by the United States Government, most nations realized long ago that the only effective governmental action they can take to solve international trade problems is action within their own countries. This is usually done through a variety of open or hidden restrictions on importing, internal assistance and subsidization of domestic industries, some kind of assistance for exporters in the forms of financing or subsidization, and tax and other fiscal policies which have the effect of placing burdens upon imports and reducing the tax or other costs on exports. Most governments employ most of these devices in one form or another. Regretfully, we have concluded that the American government will ultimately find it necessary to take action similar to that taken long ago by these foreign governments, including the Japanese.

There is no simple solution and probably no single unilateral action by the U.S. that will resolve this matter; rather, a combination of short-term actions will be necessary. Proposals worthy of consideration include:

- import restrictions
- general surcharge upon imports
- selective surcharge
- consumption tax which covers imports and not exports
- new trade agreements
- increased authority to the U.S. Trade departments

These proposals include both short-term and long-term options in the current crisis.

Clearly, a short-term solution may not prove suitable for the long run. Conversely, an appropriate long-term solution cannot be implemented in a timely manner to preclude significant near-term damage. Therefore, we believe that some combination of the options available to us should be implemented on a parallel basis.

Finally, regardless of the specific actions chosen, it is of the utmost importance that the decision and implementation occur swiftly and decisively.

Senator **Gorton**. Thank you, Mr. Cornell.

Mr. Heimlich.

STATEMENT OF RICHARD HEIMLICH, VICE PRESIDENT, JAPAN OPERATIONS, MOTOROLA, INC., WASHINGTON, DC

Mr. **Heimlich**. Thank you, Mr. Chairman. In my testimony I have summarized Motorola's experience in Japan for more than 20 years and I won't repeat that here this morning.

Senator **Gorton**. That will be included in the record.

Mr. **Heimlich**. Thank you.

[The complete prepared statement follows:]

RICHARD W. HEIMLICH
VICE PRESIDENT, DIRECTOR OF JAPANESE RELATIONS
MOTOROLA, INC.

TESTIMONY

BEFORE THE
SUBCOMMITTEE ON INTERNATIONAL
FINANCE AND MONETARY POLICY

OF THE

SENATE COMMITTEE ON
BANKING, HOUSING AND URBAN AFFAIRS

JULY 30, 1985

I am here today to discuss the detrimental effects of Japanese targeting practices on the U.S. semiconductor industry.

Motorola's efforts in the Japanese semiconductor market date back to the early 1960's when we began selling in the Japanese market. Due to the Japanese government's restrictions on foreign direct investment, we were unable to invest in manufacturing facilities, while in Europe we were able to establish a significant local manufacturing base. Our export efforts were constrained by import quotas and tariffs. These investment and trade restrictions remained in effect until the mid-1970's.

About four years ago, Motorola formed a 50-50 joint venture with Toko KK, a Japanese semiconductor company located in the northern part of Japan, to produce large-scale integrated metal oxide silicon (MOS/LSI) integrated circuits. Two years later we became sole owner of this operation. Motorola was the second U.S. merchant semiconductor company to establish a manufacturing base in Japan. We have made major investments to improve and expand our existing plant. We are now planning to construct a second plant in Japan.

Despite over 20 years of effort to establish a significant position in the Japanese semiconductor market, our current supplier position is by far the worst for us of any significant market. In Japan's back yard -- the Asia Pacific market -- we are among the top suppliers. In Japan, our position is nearer the bottom of the list.

What accounts for this poor performance in Japan? The heart of the problem is Japan's targeting of the semiconductor industry, which dates back to the 1960's. The history of these targeting practices has been well documented in studies by the Semiconductor Industry Association (SIA) and others. The SIA's recently filed Section 301 case describes the current situation very well.

To put the issue in perspective, I would like to summarize for you the results of a very recent study on the impact of Japanese targeting of the U.S. semiconductor industry. The study was prepared by Quick and Finan Associates for the USTR as part of that agency's review of targeting under Section 625 of the Trade and Tariff Act of

1984. Its conclusions have been carefully reviewed by U.S. Government agencies and by outside experts.

- Because of Japanese restrictions on direct investment, the U.S. share of the Japanese market in the 1960s and 1970's was about half of what it could have been had American firms in that period been able to establish marketing and production facilities in Japan. Once established, this market position would have probably persisted. (In other words, our sales in Japan would be double their current level if investment restrictions had not existed. In 1984, that amounted to about $750 million).
- This suppression of U.S. sales in the Japanese market has a significant effect on learning curve benefits which in turn increase Japan's share of other markets, at U.S. expense.
- In the U.S. market, the estimated range for loss due to the combined effects of all Japanese targeting programs (except past restrictions on investment) ranged between ... 18 to 49 percent of the Japanese market position in the U.S. ... and a reduction in employment in the U.S. industry of between 6 to 14 percent. (Japan's sales in the U.S. market were about $1.5 billion in 1984, so this translates into at least $270 million and as much as $750 million).

Dr. Finan's study thus finds that Japan's targeting of the semiconductor industry has had a very substantial adverse impact on U.S. firms. And this conclusion probably understates the problem significantly since the study did not try to estimate the indirect effects of Japanese targeting of electronic equipment industries on the U.S. semiconductor industry. If highly competitive U.S. electronics equipment products had not been restricted in Japan, and Japanese producers had not been supported by their Government, the U.S. share of both Japan's and the world electronic equipment market would be much greater -- generating significantly larger sales opportunities for U.S. semiconductor firms which instead went to Japanese firms.

Based on Dr. Finan's study and two studies of targeting in other industries prepared for the U.S. Government, the USTR issued a report on July 15 that concludes on a preliminary basis that "successful targeting may enhance an industry's competitiveness in the U.S. market and third country markets" and that targeting "appears to work most effectively in industries characterized by a short product life cycle, a rather steep learning curve, and high R&D expenditures." The report goes on to conclude there are six limitations of existing U.S. trade laws in addressing targeting practices in that they do not:

- address GATT-consistent home market protection;
- offset the economic effects of targeting when they are separated from the government practices by time;

- counter alleged "multiplier effects" that arise because commercial banks might give a targeted industry preferential lending terms;
- offset fully the effect of targeting in third country export markets;
- counter the entire benefit associated with unfair R&D assistance; and
- address cooperation among private firms which allegedly enhances competitiveness.

Inexplicably, having identified these very significant inadequacies in U.S. trade law -- one might say these six issues are the core of the targeting problem -- USTR draws an overall conclusion that existing trade laws are for the most part adequate. I believe that conclusion is logically inconsistent with the analysis presented and can only be understood as a policy position designed to avoid significant changes in U.S. trade law which might be criticized by other countries.

What should be done?

First, the Administration must be persuaded to seek commitments from Japan to increase imports in sectors where U.S. industry is internationally competitive, to a level commensurate with that competitiveness. In semiconductors, SIA believes that should produce at least a 50 percent increase and Finan's study implies at least a doubling in the present U.S. position.

Second, the Administration should use its existing Section 301 authority to prevent Japanese exports from further eroding U.S. competitiveness, until the first goal is achieved.

Third, the Congress should pass legislation that ensures the Administration achieves the foregoing objectives.

Finally, the Congress should pass legislation that deals more effectively with the injurious effects of foreign targeting practices. S1356, which was introduced by you, Mr. Chairman, would be a significant improvement over existing law in addressing targeting problems by requiring the President to offset injurious effects of targeting.

For the U.S. merchant semiconductor industry, the response of the U.S. government to Japanese targeting is of critical importance. The Japanese are committed to succeed in semiconductors as a route to success in electronics overall. Japan has recognized semiconductors as strategically vital to its future. The question is whether the United States will do the same and respond accordingly.

Senator GORTON. Thank you, Mr. Heimlich.

Senator Cranston would like to say a word of introduction of Dr. Noyce.

Senator CRANSTON. I would just like to say that Dr. Noyce is one of the most thoughtful, creative, and successful of the 25-million constituents that I represent in California. I did want to say, Bob, that if I get up and leave in the middle of your testimony, it's not because of lack of interest, but it's because I am compelled to go to the Foreign Relations Committee.

Senator GORTON. Dr. Noyce, with that, welcome.

STATEMENT OF ROBERT N. NOYCE, VICE CHAIRMAN OF THE BOARD OF DIRECTORS, INTEL CORP., SANTA CLARA, CA

Mr. NOYCE. After writing my testimony, I ran across this article in the New York Times. I know that Ted White is a much better writer than I am and I would commend the article to your reading. I'd like to read it into the record but let me just quote the lead in to it which is:

> Today, 40 years after the end of World War II, the Japanese are on the move again in one of history's most brilliant commercial offensives as they go about dismantling American industry. Whether they are still only smart or have finally learned to be wiser than we, will be tested in the next 10 years. Only then we will know who finally won the war.

The semiconductor case is but one case in the long history of unfair trade practices of Japan. Japan only protects three categories of industry: Those that are politically sensitive like beef, or cheese, or citrus for us in California; those which are not yet competitive, the so-called emerging industries under which they were able to protect the semiconductor industry at the time that we should have been making our investments there—and incidentally, I would like to point out that none of the major semiconductor industries in the United States are older than any of the major semiconductor industries in Japan; Japan's were protected under the infant industry legislation—then, the third category are those industries that are no longer competitive, namely, the troubled industries.

SYSTEMATICALLY DENIED PENETRATION

What they have done then is to systematically deny any advantage that any foreign exporter into Japan might have to penetrate that market. That has led to a confidence on the part of their manufacturers that has led to overinvestment. They are not exposed to the hazards of foreign competition and that, of course, results in dumping and in the kind of sales memo that Senator Heinz presented to us this morning.

The semiconductor industry has certainly favored a negotiated solution to this problem and we were a part of the high-technology trade talks with Japan. We favored that kind of negotiation first. That does not seem to have worked. Consequently, we have filed a section 301 petition.

Since that filing, the dumping of semiconductor products in the United States has indeed decreased, but we see another threat now which is perhaps an even more serious threat, in the dumping of Japanese products to eventual American markets offshore. Prices in Hong Kong in offshore procurement areas now are much, much lower than they are in Japan or in the United States. Those products can be assembled into downstream products and be brought into the United States at the further destruction of the American electronics industry.

When the question was asked as to other trade legislation that is needed, certainly downstream product protection is essential if anything is going to be done on any particular intermediate product.

CHOOSING THE SINGAPORE SOLUTION

The problem is getting severe. Each day American management is making decisions as to whether to locate new factories in America or abroad. More and more they are choosing what I call the Singapore solution, that is, any time we get into competitive trouble in America we move the manufacturing jobs offshore.

For a while the servicing of those manufacturing jobs can indeed still be done in America, but eventually all of the infrastructure that supports that manufacturing will move offshore as well. It takes perhaps a 3-to-1 difference in wages to move those industries offshore. I question how much of the differential it will take to move them back onshore at a later date. Will the American people be willing to take a 9-to-1 reduction in their real wages in order to maintain their manufacturing jobs? I think that point is crucial.

What are we doing within Intel? Even though we have done the research on the most advanced of the DRAM's, the 1-mega-bit DRAM, we have decided that we will not make it in the United

States. We feel that the Japanese will target that market and will wipe us out of it, and we will get no return on the investment. Rather than that, we are moving upscale to products that involve much more complexity in microprocessors and systems products which require manufacturing capability, design capabilities, software and marketing skills that are necessary for the advantage.

We have a special advantage there. We can compete with the Japanese there. But in the broad commodity markets we don't feel that under the present circumstances we will be able to compete long term.

Semiconductors will surely join the list of "fill-in-the-blank" that Clyde Prestowitz was talking about. We don't make "blank" any more, whether it's television sets, or ballbearings, or motorcycles, or automobiles, or steel, or VCR's.

Recently I have been involved in some venture capital decisions as well, where the decision on the part of the venture capitalists was simply not to support that new idea because it was exposed to potential Japanese competition. That's damning to the future of American industrial growth.

You mentioned, Senator Riegle, the problems with the stripping of American capital from our industrial base. I would just like to say in passing here, and as a conclusion, that one of the considerations that will be coming up in this Congress is tax reform. The tax reform as presently proposed by Treasury II is a massive shift of tax burden from the individual to the corporation. The individual is notably a dissaver in our society. The largest part of our savings in the society is from retained corporate earnings. The tax law as presently proposed will strip that source of savings out of the American industrial base and I think it is very bad.

In short, the time for action is for now. If we don't do something very quickly this industry, and its downstream products, will move offshore. That means the computer industry, the industrial automation, all of the tools of the modern American production society. Thank you.

[The complete prepared statement follows:]

TAX POLICY IS TRADE POLICY

"Testimony regarding federal tax reform
and its impact on U.S. trade performance."

Given Before the United States Senate
Committee on Banking, Housing and Urban Affairs
Subcommittee on International Finance and Monetary Policy

By Dr. Robert N. Noyce
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Santa Clara, California

July 30, 1985

Tax Policy is Trade Policy

A Free Trade Tradition

For more than four decades, the United States has been the leading proponent of the world's free trade system. This has been especially true of the American electronics industry, which has flourished for the past twenty-five years.

Yet today, more and more Americans are questioning the validity of the free trade philosophy. They look at the growing trade deficit -- a record $123 billion last year and expected to be $160 billion this year -- and the seemingly resultant loss of thousands of manufacturing jobs. The cry of "fair as well as free" trade has become a chorus of voices from many quarters.

What has happened? Has our national prosperity made us complacent and less competitive? Has "Yankee ingenuity" died off? Or is something else going on? Have the rules of the trade game changed, and, if so, how should national policies be improved to reflect those new realities?

The New Reality

America emerged from the Second World War producing more than half of the world's goods. Through programs such as the Marshall Plan, we helped rebuild the economies of our trading partners. At the same time, we established an open and competitive market structure through treaties and multilateral trade agreements. The General Agreement on Tariffs and Trade (GATT) is the symbol of this valiant international effort toward commercial cooperation.

Multinational corporations sprang up, and global production was rationalized by market forces as never before in history. An expanding free trade network seemed to enhance prosperity for all who participated. As testament to this fact, the U.S. contribution to global GNP fell to 25% by 1960, yet our nation itself saw a GNP increase.

This new-found prosperity was particularly manifest in America. With vast natural resources and unmatched industrial might, we developed the world's first "consumer" society. The standard of living rose dramatically, and we could afford to import nearly as much as we produced.

America's last positive trade balance was recorded in 1975 and deficits have accelerated ever since.

The U.S. tax code encouraged this drift from a saving to a spending society. Mortgage and loan interest are tax deductible, while interest on savings and investments is taxable. A clear preference favoring real estate over securities investments was established and persists to this day.

Public debt was allowed to rise along with private borrowing. The federal government has not balanced its budget since 1970, and today we face deficits in excess of $200 billion as far as the eye can see.

While America evolved from a saving to a consumption society, the seeds of future trade friction were being sown. Witnessing the great benefits of U.S. industrial expansion, developed and developing countries alike began to fashion national strategies to accelerate their own commercial growth. It became popular to "target" key industries and to protect those industries with import barriers. The Japanese semiconductor industry, for example, was officially protected until 1975.

Domestic content requirements proliferated, as did limitations on ownership of direct investments. To this day, Mexico generally requires 51% local ownership of its industry, and Brazil and others require certain industries to produce locally in order to sell locally. The list of tariff and non-tariff barriers is long, indeed.

Watershed

America's industrial machine can no longer withstand the twin shocks of deficits at home and unfair trading practices abroad. It has been estimated that each manufacturing job carries along five other jobs: the banker and baker, the inn keeper and insurance agent, and the like. Who will be the customers for these workers if the basic wealth-creating jobs in manufacturing are lost? While we may survive in servicing manufacturing activities abroad for a while, the infrastructure supporting overseas manufacturing will surely move overseas as well. Our reentry into manufacturing will be much more difficult, depending on lower wages (an unmentionable) as we try to compete on the world market.

American consumerism is one of the major forces limiting our ability to act in our own self-interest. We like to have cheap cars, TV sets and VCRs. But what does it really cost us? Those inexpensive imports cost us a great deal more than the price tag on the item in the store. Each million dollars per year worth of goods imported rather than produced locally cost ten jobs in manufacturing. That costs the loss of another fifty jobs in service and support industries. So long as those workers are unemployed, their cost to the American public - to other workers through unemployment benefits, or to the taxpayer through assistance programs - is around $7,000 per year. Thus the initial million dollars of imports cost Americans another $420,000 of hidden costs so long as we are not at full employment.

If the consumer had to pay the full cost at the time of purchase rather than in his taxes (payroll or other), would he buy that Japanese auto?

Perhaps we are at a watershed period in economic history. The time for fundamental policy change -- in both the trade and tax areas -- is now at hand.

With respect to trade, markets such as the Japanese must be truly opened to the rest of the world. The semiconductor industry, for instance, has recently filed a 301 Trade Petition asking not to close the U.S. market, but to open Japan's. Our Japanese competitors must be exposed to the risks involved with foreign competition, just as we are in this country. As it now stands, Japanese chip manufacturers have enjoyed a constant 90% market share at home, no matter how dramatic are currency fluctuations or how low tariffs have dropped. Such a protected export base is a Japanese advantage U.S. industry may not be able to withstand long-term.

Japan is now enjoying a trade surplus greater than OPEC at the height of the oil crisis. This is largely due to the carryover of the policy of import substitution, along with the promotion of saving and investment in post-war Japan. Today that policy is outmoded, and Japan's prosperity is based on the destruction of other countries' economies.

We cannot ask Japan to have an equal balance of trade with the U.S., for Japan is dependent on imported energy, foodstuffs and raw materials. But we can ask that Japan, or other nations, move toward an overall trade balance. We have done that in the past ourselves, and should be doing so today, albeit in the opposite direction.

What, then, should we as a nation do toward this end? Product specific quantitative limits on imports are dangerous, and usually do not work in the long run, as is amply demonstrated by steel and autos. Rather, to allow the shifting of American industry to those areas most appropriate to our nation, and accommodate the inevitable change in our industry, we should tip the balance to favor local production rather than imports.

That might be accomplished by developing a real "buy America" attitude on the part of all purchasers. Although that is very effective in Japan, it is doubtful it would work in the U.S. with its wide diversity. Since Americans typically act in their own self interest, rather than that of the nation, a more effective method would be to increase the cost of imported goods to the American consumer. Imposition of a business transfer tax (BTT) might be a very effective solution. It is a tax on consumption, not savings. It would be added as imports arrive, and "forgiven" as exports are shipped abroad. Further, it would help us address these huge budget deficits that inflate the dollar, increase capital costs, and threaten our financial future.

In more general terms, trade must be a two-way street or the street will one day be closed off. As in any relationship, if one party seems at a constant disadvantage, the relationship will become less than valuable to that party.

With respect to tax reform, we must understand how closely tax policy is tied to international competitiveness. Our tax system is "de facto" industrial policy, and a bad one presently. It discourages saving and encourages borrowing. It also results in the highest effective tax rate for the sector of our economy most affected by competition from abroad -- manufacturing.

What is critically needed is reform that makes a fundamental shift from a consumption to a savings based tax system. Savings and investment are the lifeblood of our economy. Capital formation and its prudent use determine productivity growth, and ultimately, the standard of living of our citizens.

In this regard our record is unimpressive. American productivity growth has been surpassed by all our major trading partners. The Japanese growth rate since 1960 has been five times greater than our own.

This productivity rate is directly linked to savings. If you take our six major trading partners and rank them from top to bottom on capital formation, that listing will almost exactly mirror their ranking in productivity growth; and you will find Japan at the top of both lists, the United States at the bottom.

We favor tax reform, particularly regarding the encouragement of savings rather than consumption. The President and several members of the Congress are to be commended for bringing this issue to the nation's attention.

Since the "Treasury II" proposal is the most active initiative currently, I will focus specific comments on its provisions. In general, Intel supports basic reform, but cannot endorse Treasury II. Frankly, it misses the mark to-date in terms of international competitiveness. I am informed, by the way, that the full Treasury report does not even mention trade as a consideration.

Specifically, here is what we would like to see modified in that proposal:

Research and Development Tax Credit. The Treasury proposal would extend the R&D Tax Credit for another three years. While we applaud this recognition of the importance of technology advances to American competitiveness, the credit should be made permanent. Typical R&D projects have a four to six year life span, and the Japanese permanent R&D Credit recognizes this reality. So should ours.

Intel expends 15% of net revenue for R&D. Our industry average is 8.5%, much higher than the 2.8% average for all manufacturing. In addition, to fully encourage R&D the current moratorium on the allocation of R&D expenses to foreign source income should not be allowed to expire.

Capital Cost Recovery System (CCRS). Treasury II would replace the Investment Tax Credit (ITC) and the Accelerated Cost Recovery System (ACRS) with the Capital Cost Recovery System.

Once we do the R&D, we must put it to work. That means new plant and equipment, and that involves capital spending. The current cost of capital in the U.S. -- according to the Department of Commerce -- is 16.6%. The Japanese cost averages 9.2%.

The semiconductor industry is America's most capital intensive business. Dataquest figures show that we plow 20% of net revenues back into factories, land, and machinery. During this decade alone, our industry spending in this area will exceed $33 billion! Therefore, the capital cost issue is vital to us. While the proposed Capital Cost Recovery System may be an acceptable alternative, our equipment must be re-categorized from Class 4 to Class 1 in terms of useful life. Due to constantly changing technology of semiconductor manufacturing, Intel's equipment has lives much shorter that the seven years of the Capital Cost Recovery System Class 4.

Depreciation Recapture. This unprecedented ex-post-facto attempt to tax past investments is unfair and penalizes those companies that invested in this country rather than abroad. The tax bill of 1981 encouraged the very same investments that would now be penalized. Intel made many such investments. This proposal would impose an additional tax on so-called excess depreciation. The problem is that the measurement of excess depreciation is wholly unrealistic. Intel's equipment have much shorter economic lives than the 12 year category in which we would largely find ourselves.

Foreign Tax Credit. The Foreign Tax Credit allows a credit for taxes paid on non-U.S. earnings. Our major trading partners have similar laws, or only tax income where earned. These provisions are recognition of the need to compete abroad as well as at home.

The "per country" limitation proposal could expose U.S. companies to double taxation, and would surely be an administrative nightmare. In addition, it is premised on the incorrect notion that international investment decisions are made for purely tax reasons. In fact, tax is but one relatively minor factor. The proposed change in the sourcing of export sales income will compound the exposure to double taxation.

Puerto Rico "936". Intel has produced computers in Puerto Rico since 1980, and today employs nearly 1,000 workers there. Investment in Puerto Rico makes business sense (versus non-U.S. locations) due to the "936" tax incentives. Our hourly costs in Puerto Rico are nearly equal to our cost for identical processors in Oregon, for example. The Japanese offer equitable tax benefits for manufacturing in numerous sites via "tax sparing" in tax treaties. "936" was meant to enhance that small island's economy and it has worked beyond expectations. The proposed "wage credit" will not continue this progress as the Treasury believes, but will in fact reverse it. In our case, our entire Puerto Rico operation would be in jeopardy.

Summary

These are our reflections on tax reform, and its substantial relation to trade competitiveness. The standard of living of a society such as ours can only be sustained by thinking smarter (promoting R&D) and working smarter (promoting capital investment).

To maintain our prosperity and social advances, we must encourage saving, investment in new ideas and processes, and sale of American products worldwide.

Today's new reality is, "if you cannot compete internationally, you may not be able to compete at all."

Thank you.

Senator **Gorton**. Thank you very much, Dr. Noyce.

A general question to start out this part of our hearing. To what extent is price important in selling in Japan as against sales here in the United States and to what extent are you frustrated without regard to price. I'd like to hear some specific examples of those frustrations, those nonprice frustrations, at least, even when trade barriers are nominally removed? Who wants to start out on that?

Mr. **Parkinson**. Our observation there would be consistent with Harris' experience that to the extent the product is not yet available in Japan, the Japanese will normally negotiate on price, but as soon as the product does become available in Japan price is no longer a consideration. It's simply purchased from the Japanese manufacturer.

CULTURAL RESTRICTION

Senator **Gorton**. Now does that mean that price is no longer a consideration because you can't meet their prices or because it really simply doesn't matter?

Mr. **Parkinson**. It does not matter. We can readily meet their price, have on a number of occasions, and met uniform lack of success once a product is available in Japan.

Senator **Gorton**. Is that due to formal trade restrictions?

Mr. **Parkinson**. No. This is strictly cultural.

Senator **Gorton**. Mr. Cornell.

Mr. **Cornell**. I think to put it succinctly, if you don't have an opportunity to quote before the order is placed, price is not an issue and you don't have the opportunity to quote simply because an agreement is reached based on historic relationships. If the supply is available you never see the business. So therefore price is not an issue.

Senator **Gorton**. Would you agree with Mr. Parkinson that this is a cultural rather than a formal trade restriction?

Mr. **Cornell**. It's clearly a structural aspect of the way in which business is accomplished.

Senator **Gorton**. Mr. Heimlich.

Mr. **Heimlich**. Our observations are quite consistent with my colleagues and there are a variety of factors that go into a purchasing decision and one of them is a different mixture of factors in Japan than there are in the United States where they are more demanding in terms of the quality aspect, but we feel we can compete on that basis as well as on price, but we run into other kinds of problems beyond the normal factors one would think of in making decisions.

Dr. **Noyce**. A couple of bits of evidence there. One, is regardless of what the exchange rate between the yen and the dollar has been, there has been no shift in market share in the Japanese market. Another indicator would be the relative sales of Japanese companies and United States companies in third markets, and in the European market. For instance, we outperform the Japanese by about 4 to 1 in terms of market share. So it is probably not a question of price and quality competitiveness.

Senator **Gorton**. Dr. Noyce, one of the alarms that you raised in your testimony was a very significant price differential in third countries in your competition with Japan and other Southeast Asian nations.

Dr. **Noyce**. This happens at a time of surplus capacity in Japan. Recently I was on a panel in the usual investors panelists, a panel up in Boston, and I happened to follow at breakfast the dinner speaker of the night before who was from Hitachi, and the question was asked of him whether there would be any reduction of production at Hitachi during this oversupply. He said, "Of course not." It has to be sold somewhere.

Senator **Gorton**. When you were speaking about these other East Asian markets your competition with Japanese manufacturers obviously is based on price, I gather.

Dr. **Noyce**. I think in that case when it's a 2-to-1 difference, yes, but typically the prices are not that violently different.

Mr. **Parkinson**. If I might add to that, clearly price and quality are considerations in America. Again, I think what we're hearing here today is that Japan operates in a secure 20-percent base, a weapon that they fully utilize in world markets. What is quite clear to me is in America we have an unused weapon. We have a 50-percent base where there has not been a marketing advantage to locally produce and were we to use this weapon in a manner similar to Japan—in other words, either America has got free trade or Japan has got free trade. Let's decide which it is, Japan or America, and let's pursue a course that's consistent in both countries.

Senator **Gorton**. One of you mentioned in written testimony that the Japanese are currently without any competition in the 256K DRAM market, is that correct?

ABDICATION TO THE JAPANESE IN THE 256K DRAM MARKET

Mr. **Parkinson**. That's correct except Micron is now entering volume production for the open market. IBM and ATT build for internal use, ATT some for open market. TI moved to Japan. National, Intel, AMD, Mosler have quit.

Senator **Gorton**. Is that evidence that our manufacturers are behind the Japanese in technology or what other reason is there for that?

Mr. **Parkinson**. Quite the reverse. It's the results of decisions such as Dr. Noyce's. Some of Micron's penetration of the DRAM market is by default of the other American manufacturers. I personally believe that Intel at least had, if they no longer have, a substantial technology base. I hear Dr. Noyce saying that he's doing advanced DRAM's and he could easily penetrate that market were he to decide to do so. It's not an issue. No one will know where the true technological leadership is because they have decided to go out of the market. Several other American companies are now making the same decision and so the American technological mantle in DRAM's is going to be carried by Micron because we are the only ones in the open marketplace, and we're the ones competing with Japan. I think were conditions otherwise, I would have more confidence in America's technological leadership or at least the continued leadership thereof. I admire Dr. Noyce's ability to pull together a more complicated product family than is exhibited on DRAM's. I do, however, challenge whether that represents technology or good management of a whole list of their products. In the case of DRAM's, we're talking about a product that has got 1 million transistors. Whereas 7 transistors sold for $1 15 years ago when I came into the business, today Micron is selling 1 million transistor chips for $3. Is that technology? It's certainly a form of it compared to an Intel product that embodies software, manufacturing excellence, and marketing.

Senator GORTON. Dr. Noyce, would you comment?

Dr. NOYCE. I think that with the capital intensiveness of the industry today we have to seek returns on that capital consistent with its present costs. We don't believe that with the targeting of not only Japan but very close on its heels Korea we will be able to achieve those returns on the commodity or semicommodity products.

There is one area where we are dedicated to staying in the commodity products and that is in the E-prom which incidently was the subject of that Hitachi memo and our strategy in that is we feel that we have a birthright to that market and we are going to stay in it even though we are going to continue to lose money in it probably for the next 2 or 3 years.

Mr. PARKINSON. Now wait a minute.

Dr. NOYCE. We are losing money in it now.

Mr. PARKINSON. Intel invented the DRAM. Are you telling me that you're not going to repeat what you did to DRAM's. Are you going to say that you're not going to leave the E-prom market?

Dr. NOYCE. That's correct.

Mr. PARKINSON. Get that on the record. I think what you should do is ask Dr. Noyce how he could better assure that he's going to stay in commodities. What kind of climate does it take to have Intel stay in commodities, because they're going out of it, believe me.

Senator GORTON. Do you want to comment on that, Dr. Noyce?

Mr. NOYCE. The climate, I think, is one that will promote not only this industry but other industries to make the decision that America is the best place in the world to set up the production of that item. Now that was covered in the report on industrial competitiveness and incidentally that report did treat trade as one of the four issues it mentioned. I was on the Commission and it was to make trade a national priority. It's absolutely essential to make trade part of our overall planning for the Nation.

With the dollar where it is now, probably that decision will not be made because it is cheaper to send manufacturing to other parts of the world. If we can get the dollar down to more reasonable levels, yes. That still does not solve the Japanese problem where there is protection on all sides.

FOUR SPECIFIC RECOMMENDATIONS

Senator GORTON. That leads me to Mr. Heimlich. In both his written testimony and his oral testimony, he made four specific recommendations—securing a commitment from the Japanese to a substantial increase in purchases, 50 to 100 percent; second, the use of section 301 authority against exports until we meet the goal of their purchases from us. Third, that we in Congress pass mandatory legislation I gather other than authorizing legislation to see that that happens; and finally something like Senator Heinz' S. 1356. Now those are four quite specific recommendations.

Do the other three of you agree with those recommendations? Do you have anything to add to them or would you simply support them?

Mr. CORNELL. I would comment on that. I believe that the recommendations that Mr. Heimlich have suggested are in the right direction. Speaking for my company, certainly our concern is that to do something quickly and whatever you do I think it's going to have to embody the combination of actions. I think there's a fallacious reasoning process and that is to look at all the alternatives that are available and choose one. The problem there is some of those that we would think might be more appropriate in the long term will also take considerable time to implement. So I believe that there are certain things that we could do today that we might not be happy with in the longer term, the kinds of things in that category that we can do more or less instantly are in the area of import restrictions or surcharge like things. Those might not be good in the long term but they are the only things we can do overnight. And then there becomes the medium term of other things that might be effective in the form of some form of consumption tax that may be more equitable. Perhaps through granting stronger authority to do something on a mandatory basis they may have some medium-term benefit and, of course, ultimately there may be modifications in the area of trade agreements that we can extend. But I think we have to look at that whole spectrum of things. Therefore, a multifaceted approach clearly has got to be adopted because no one thing is going to be practical because if we wait for some of the more desirable solutions it may be too late. So I think our view here is that we may do some things in the short term that simply I would view as being the means of balancing the playing field, the basis on which we do business, until we can come up with more suitable means.

So I would agree that a combination, including such things as he suggested, would be right for this.

Mr. PARKINSON. I think as Senator Cranston mentioned, Dr. Noyce is his most successful constituent. I guess the question I would have is: Are we successful if we move out of commodities, if we're all spending our time running from the Japanese the minute they turn their eyes toward our business? And more fundamentally, we're in business and we are a charity unless we're earning a profit and to earn a profit with the production of a targeted Japanese product it's necessary to meet the Japanese head on on their same terms. Again, I say to you there needs to be a marketing advantage for U.S. produced goods or those goods are going to be produced——

Senator GORTON. Would the suggestions that Mr. Heimlich makes create that advantage?

Mr. PARKINSON. I don't think so. Again, you're talking about a broad brush responding to a rifle shot. This is not a shotgun. We're talking rifle shot. What I think you need to do is come up with a specific program that reverses targeting. To the extent they target an industry, you're talking about excessive exports compared to imports. If those exports are penalized with a surcharge and that surcharge is in turn distributed across to the other base of sales for all manufacturers in the business, you will immediately blunt the instrument of targeting. As we all know in business, the predictability of a business is also an important factor. If we don't have the fundamentals that lend predictability for our future, where is business going to pick out businesses which are more predictable? If you can blunt the targeting instrument with direct reverse action on that specific item, I think then you will encourage the Japanese to apply their thinking in a different direction.

The most dangerous factor in American business today is the targeting instrument and I think it can be blunted. Again, they are targeting our industry. We have the potential to a secure base. I personally believe that a broad brush will not work.

AMERICAN INDUSTRY IS BLEEDING TO DEATH

Mr. Noyce. I think American industry is bleeding to death now and although a tourniquet, if applied and left in place, will cause gangrene, it would be almost immoral to drive by an accident victim along the side of the road without stopping to put on the tourniquet and getting him to the hospital. For that reason, I think that we have to act quickly to reduce the trade deficit and to put a surcharge on those countries which are running very high trade surpluses. That should be automatically removed at the time the problem is solved, but there is no approach that we are now taking which is making progress.

Senator Gorton. Senator Riegle.

Senator Riegle. That's a very powerful comment. You've given us some very important testimony. I have been in Congress 19 years and I have listened to a number of witnesses, but I have not heard a panel that has set out a problem more clearly in terms of its present dangers and even more importantly, in terms of its future dangers. I think you have given us the basis for a response so that we may soon be as competitive as any other country.

We have a tendency in this country to lag behind in our response to problems. I think this is a problem that if we continue not to act we're jeopardizing our economic future. These are profound changes for our Nation. Our ability to carry out our worldwide defense commitments 5 or 10 years down the road depends on our having the technology and being able to generate the competitive superiority we need for our defense capabilities. The same is true, of course, for our domestic living standard which is really only the sum total of everything we produce. Our living standard is the value of all we produced divied up by all the people in the country minus all the other uses of our national income. While right now individual sectors are sliding backwards, we're either now at or we will soon be at the point where we're going to start sliding back in the aggregate. That's the great danger.

Dr. Noyce, you're nodding your head. I gather that you see it on those kinds of terms yourself?

Dr. Noyce. I do. I worry about it.

Senator **Riegle**. I thought your quote that American industry is bleeding to death was exactly right. It's one thing when that's said with respect to the so-called smokestack industries, such as steel, automobiles, and industries that tend not to be very popular industries with economists and the economic writers. When we have people who are in the state-of-the-art sector of the electronics and computer component area of the economy coming and telling us the same thing, however, it seems that this puts the problem in quite a different and quite a stark light.

It's one thing to talk about a problem that's confined to the so-called rust bowl. Its quite another thing to talk about the Silicon Valley facing the same pressures and the same damage. We're talking about a problem of national scale in the full sense of the word. We're talking about a 50-State problem. We're talking about a problem that stretches across the entire manufacturing foundation of our economy. This is not an isolated problem. The Japanese have very skillfully leapfrogged from product to product and they have moved up to the lead technologies, to the horizon technologies. They are moving now at the same pace as we are in areas where we've had the greatest competitive advantage. They are clearly of a mind to step past us and are amassing and targeting the resources to do it, while we as a nation are asleep at the wheel.

NEED TO FOCUS ON THE NATIONAL INTEREST

We will not be able to respond to this type of national strategy unless we think as a nation. The problem that worries me is that we're being put to the edge as individual companies and individual companies can't overcome these built-in differences, no matter how incredibly hard they work. There is just not enough money capability for them to do it by themselves. It's a divide and conquer theory. If Japan can take on the American companies firm by firm, and then industry-by-industry, they are going to win every single time. It's just a question of how long it takes. So we have to now, think in a composite way. We have to think in terms of our national interest. That's essentially what Theodore White has said in this piece in the New York Times on Sunday. We need to punch through some of the mythology that passes for fact and knowledge in the writings that are being done. The popular literature says that any response to this problem is protectionism or it's somehow a violation of the free market system. That is utter nonsense. The country is in danger and we're not doing anything about it.

A National Commission of 30 individuals, including you, Dr. Noyce, did this phenomenal piece of work over a year's time, and came back with very important national recommendations. I'm appalled that they have nearly, but not quite, been tossed in the ash can. You were not invited to make a presentation at the White House which the National Commission on Drunk Driving and a couple of other national commissions were invited to do and properly so. Instead, you were sent down to the Commerce Department and, basically, given sort of the back door treatment. We've not seen much of the Commission's work since and these are urgent matters.

I was taking notes as you were testifying, and its clear that you're all telling us, with great urgency, of the need to deal with this problem. You're saying act now. Time is running out. Act very quickly. That is a common statement of each of the four of you.

It seems that you're also saying that this has a long-range strategic dimension. There are three areas I'd like to have you respond to for the record.

First, I heard something today that I have not heard in quite the same way before. That is, Japan, in two stages, has first protected their market from our products, keeping us out until they have been able to strengthen their specifically chosen industries. That has caused one kind of harm to the United States because that's kept us out of their market and prevented us from getting a fair market share, as your study points out, Mr. Heimlich. So that was one level of indirect damage that has been done to us.

Now they have begun to use that strength to penetrate our market with a targeted strategy to come in and kill off American companies and capture broad segments of the production in this country. That's a second level of strategy that is far more damaging. The first kind is damaging in the sense that it diminishes our strength to compete. The second is damaging in the sense that it basically leaves us in a situation where we're going to have people driven out of the business. That's an entirely different kind of damage. That is an aggressive, predatory, onshore, job-stealing, industry destroying kind of damage. That's exactly what it is, nothing less. When I see us forfeiting a lead in the electronics industry that we have painfully acquired over a long time, I'm not sure that we're going to be able to maintain world power status. I think the electronics industry is a bona fide strategic industry. While I also think we need to have a steel industry and a heavy manufacturing industry as well, we're in an age where computers and electronic gear are essential to our ability to produce competitively and produce enough.

PENETRATION IN STRATEGIC AREAS

It seems to me what is happening now is we're seeing penetration in strategic areas that hold out an entirely different kind of long-term damage to this country. Our economic future will be jeopardized in a brand new way and on an entirely different scale than we've ever conceptualized, let alone talked about, before. We are still living with a World War II mentality where we always come out on top and we're always the winners. We are not the winners in this situation. It seems that we're becoming losers in this situation. We are not doing much in the way of a national strategy, an intelligent national strategy, to define and respond to a national threat. It seems that everything I've heard you say today points to a national threat. If we don't see it in those terms, we're fools. I'd like your response. Just go right down the table.

Dr. NOYCE. I certainly feel that way. You know, one way of looking at this situation is that we are as individual Americans subsidizing the Japanese economy by $200 a year or the rest of the world's economies by $700 a year when you look at the trade imbalance. If we were to try to pass that kind of a tax in the Senate to balance our own budget, we couldn't get it through. Yet we have been able to tax ourselves sending that wealth out of the country supporting these other economies. We are weakening our economy enormously by this huge trade deficit.

One thing that I would caution against is specific product protection. I would like to see a very broad spectrum against everything if you're going to put protection up so that you will still have the possibility of reorienting priorities within our industrial base. If we protect steel we will have an inefficient steel industry, but if we protect everything equally that money would go into the most efficient use of that money. So I think we have to be very careful about protecting semiconductors, or computers, or whatever it might be, but rather have a broad spectrum until we get our trade balanced.

Mr. **Heimlich**. I think your assessment, Senator Riegle, is an excellent one. I would perhaps give a little more weight to your judgment on the loss of the market position in Japan or any other country we're targeting because that is really the precondition which permits them to attack the United States. So it is really the early warning sign that something is going to happen down the road. From a business strategy standpoint, the inability of American industry to "take hostages" or retaliate in the Japanese market which is their primary base while they attack us in our market is extremely important given the amount of damage that can be done by the Japanese in the American market. And the bottom line there is with a very small percentage of the United States market, if they drive the prices down, the revenue losses for the American companies are much greater than they are for the Japanese companies. So it's a winning game for them.

I would certainly agree that what's at stake here is much more than the future of the semiconductor industry. The Japanese are set on a course of success in total electronics business and semiconductors is a stepping stone on the road and therefore what's really at risk here is the entire advanced technology electronics business in the United States. That's clearly what they're after. If we want to preserve a significant capability in that business we are clearly going to have significant changes in our policy, including the kinds of things that I have suggested in my testimony but also some of the broader changes that Dr. Noyce and his group have presented in the Presidents Commission report.

Mr. **Cornell**. I would certainly agree with your observations, Senator Riegle. In fact, I believe what you're saying is we're victims of acts of omission in the one sense by the fact that we never had access to the Japanese market. We're a victim of act of commission in the other sense in that the markets that we have enjoyed are being lost through targeting.

What's taking place is what Dr. Noyce described in effect is we are forced by economic realities. Now all of our companies are profit oriented. That's not immediately obvious if you look at our recent quarterly reports, but none the less, we are being forced into specialized and advanced markets and the principle here is pretty simple. Since we do not have the benefits of market trade equity, we are forced into positions where we are protected by time leadership in technology and hence we continually migrate. Harris is very similar to Intel. About two-thirds of our sales are in this direction. This is fine and some of us will be able to continue to do this. It's fine in the sense that we will be able to continue to show reasonable financial results and have the opportunity to participate in the marketplace, but on the broader sense, this is not acceptable however because we will be continually retreating from the mainstream of the marketplace. And I agree with Bob in that the ultimate implications of this we're going to be foregoing then the ability to service the industries that are using our products. The industry and technology which I think are very important and ultimately our whole defense industry will suffer because of the lack of leadership we have in the mainstream of products. So we are dealing with a situation the only way we can which is through technology leadership and technology products. Ultimately we are going to need help so that we can continue to participate in some of the mainstream markets because what's the mainstream is a matter of time. Those things today that are advanced marketplaces that we are able to participate in, tomorrow becomes mainstream and we will lose that too. The question is: How many of those can continue to lose and still maintain viability on the industry basis and particularly on the broader sense in the electronics industry?

So we need assistance to deal with the issues we described to stop that trend so I definitely agree with you.

TIMING IS URGENT

Mr. PARKINSON. I think the timing is urgent. I think the base such as Japan has is terrific. I think the trade deficit is very dangerous. It's going to shackle our children in the face of their need to get wages one-third below their competitors if they ever want to reenter. In other words, our children are going to get one-third of the wages and also dragging along a large national and foreign debt.

I think the question of industry is: Is it important to be competitive and efficient or can we rely on cleverness? I really think that's the American approach. I think a more balanced approach may be helpful in the future. Again, one of the driving factors in electronics has been improved functionality, improved quality, and improved reliability at ever-reduced prices. I think if we went around the table today and asked every manufacturer here what their minimum price of a transistor is and compared that with the minimum price for a transistor for a Japanese manufacturer, take whatever product is most dense and what it's selling at, I think you're going to find that DRAM delivers the lowest price for the transistor and that's one of the reasons for the base of the Japanese approach.

Again, perhaps the broad brush is going to help, but I say to you though the subject of today's meeting is on targeting. If you're dealing with a shotgun, you might be able to hang up a mattress to protect yourself. I personally believe we're dealing with high powered rifles that are very well aimed strategically to have maximum damage to U.S. industry in general. If Japan views us as their competitor, we should view them as a competitor as well.

Senator RIEGLE. If I may, Mr. Chairman, I have observed this problem in a Michigan-type setting. I have watched these changes over a period of years with an industrial base founded on the automobile and on auto-related industries. The Japanese very skillfully came in with targeting strategies. They had an advantage on the low-cost end, and are pursuing a step by step strategy that is forcing us into a tighter and tighter corner. They are now upgrading the product and we are seeing medium-size cars and high-cost cars coming in; we're going to see those markets eaten away just as we saw the low-end market eaten away. I was struck by your comment, Dr. Noyce, about how you're adapting in terms of using a mix of disciplines and marketing skills. In a sense, once Japan has made a general target, they come in, cut the foundation out from under us, and run individual companies into tighter and tighter corners. You specialize, and you do things you need to do in order to adopt to stay up front, and to find niches. Yes, they continue to pursue a relentless strategy that comes right up your tailpipe. They are going to wedge you into a corner and when they decide they want to come in and clean out that corner, they're going to have the essential strength to come in and do it. At a time of their own choosing, so to speak, they will be able to pick off the remaining targets. Once they've taken care of the basic structural problems, they'll be generating the cash flow that drives the research and development. As you pointed out in your report, they produce twice the number of engineers per capita as we do, so they've got plenty of people to work on these problems as well. We're putting ourselves in a posture where we can only win for a while. We will win less and less for a while, and then eventually they will take that game over. Then, we will be forced into another industry completely.

I don't know how to get the message across to the country. This situation is so frustrating right now. It is worrisome that the prevailing attitude is that merely talking about this problem is almost un-American because it violates the textbooks that I studied in college 20 or 25 years ago. Those texts aren't particularly relevant to the kind of new world economy that has emerged.

As a result, we're hitting an invisible wall. If we talk about these problems as they really exist, it is perceived as just a naked exercise in self-interest by an efficient company or a sector or even a region trying to protect itself. As if these groups made mistakes and want to survive at the expense of the national interest.

I do not think that this is the case at all. I think we're now at the point where the national interest is on the line in profound ways that people aren't yet beginning to understand. The danger is magnified by our financial jeopardy and by the credit extensions that we have build up. We can't afford to misfire. We have to keep this engine running in terms of the production of high value added products. We've got to keep our manufacturing capability going and at a very high rate. Right now, our abilities are being impaired and we're not responding.

Your testimony today was very helpful to us and I just hope that, with the chairman's help, we can force a debate. We need a national policy in place before it's too late.

Mr. **Cornell**. Could I make a comment about what you just said, please? I think one of the things we're suffering from is a problem of free trade and protectionism and labels that seem to be sort of advanced and placed on every possible thing we discuss. We almost need a new lexicon here. Words like or phrases like trade equity have been advanced. If we kind of take everything and take the labels off the ideas and put them on the table and allow them to be evaluated on the basis of their merits relative to the situation.

I agree with you. The environment is not the same and the context and the interpretations that are being talked are not the same as they were 20 years ago when these labels were invented. So unlabeling things and then examining them on their own merits without some prejudice in advance would help and we'll benefit from that.

Senator **Gorton**. Thank you all very, very much. Thank you, Senator Riegle.

[Whereupon, at 12:10 p.m., the hearing was adjourned.]

[Responses to written questions of committee members and additions material for the records follow:]

RESPONSE TO WRITTEN QUESTIONS OF SENATOR SASSER FROM WARD D. PARKINSON

QUESTIONS BY SENATOR SASSER

THE "MOSS TALKS," OR MARKET-ORIENTED, SECTOR-SPECIFIC TALKS BETWEEN THE UNITED STATES AND JAPAN, ARE DESIGNED -- AS ONE COMMENTATOR PUT IT -- TO "SEARCH FOR THE PROTECTIONIST NEEDLES IN THE JAPANESE HAYSTACK."

THERE HAVE BEEN SIX MAJOR ROUNDS OF MARKET-OPENING INITIATIVES SINCE 1982. DURING THAT TIME, THE U.S. TRADE DEFICIT WITH JAPAN HAS SOARED, TO $36 BILLION IN 1984. ONLY TWO YEARS AGO, IT WAS $21 BILLION. THE ESTIMATE FOR 1985 IS AROUND $50 BILLION. IT SEEMS THE MORE NEGOTIATIONS WE HAVE, THE HIGHER THE TRADE DEFICIT WITH JAPAN BECOMES.

NONETHELESS, HIGH HOPES HAVE BEEN PINNED ON THE MOSS TALKS.

NOW, I HAVE HEARD OF REFERENCES BEING MADE BY AMERICAN EMBASSY STAFF IN TOKYO THAT "MOSS" IN FACT STANDS FOR "MORE OF THE SAME STUFF." AN EXECUTIVE OF AN AMERICAN HIGH-TECH FIRM IN JAPAN HAS BEEN QUOTED AS SAYING THAT THE JAPANESE RESPONSE TO "MOSS" "IS TO BE A ROLLING STONE."

ALL FLIPPANCY ASIDE, HOW WOULD YOU INTERPRET THESE COMMENTS? WHAT IS GIVING RISE TO THESE CYNICAL ATTITUDES AND WHAT HOPE IS THERE THAT THINGS WILL CHANGE?

A GOOD DEAL OF THE DISCUSSION HERE THIS MORNING HAS RELATED TO JAPANESE TARGETING AND JAPANESE BARRIERS.

AND OVER THE PAST SEVERAL MONTHS, MOST OF THE ENERGY OF THE TRADE DEBATE SEEMS TO HAVE FOCUSSED ON THE NEED FOR THE UNITED STATES TO MATCH THE JAPANESE BARRIER-FOR-BARRIER. THE IDEA, OF COURSE, IS NOT TO GRIND WORLD TRADE TO A HALT, BUT TO ENCOURAGE A RELAXATION OF BARRIERS. IT MAY WELL BE THAT THE THREAT OF RETALIATION IS AN EFFECTIVE MEANS OF PRODUCING THIS RESULT.

I WANT TO DIRECT ATTENTION FOR A MOMENT, THOUGH, TO THE POSSIBILITY OF MOVING THIS COMPETITION AWAY FROM THE DE-FENSIVE SIDE, AND INTO THE OF-FENSIVE SIDE.

WE HAVE POINTED TO SOME OF JAPAN'S TARGETING TACTICS AS BEING UNFAIR TO AMERICAN INDUSTRY.

WHAT TACTICS ARE AVAILABLE TO AMERICAN INDUSTRY TO PURSUE THE SAME COURSE?

WHAT POLICIES SHOULD THE FEDERAL GOVERNMENT BE PURSUING TO TAKE ADVANTAGE OF SUPERIOR AMERICAN KNOW-HOW IN EXPANDING FOREIGN MARKETS?

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August 13, 1985

Mr. Ed Malan, Editor
Committee on Banking, Housing, and Urban Affairs
SD-534 Dirksen Senate Office Building
Washington, D.C. 20510

Re: 8-6-85 Request Letter from Paul Freedenberg
Regarding Barriers to Trade in the Semiconductor
Industry (Follow-up Questions on my Testimony)

Dear Mr. Malan:

Responding to the inquiry:

1. Senator Sasser

MOSS Talks. My opinion is that the high hopes for the MOSS talks held by those dealing with the Japanese on trade issues are misdirected. The trade staff is right. America must recognize we have a serious competitor and adversary in Japan. The MOSS talks are what Japan likes--talk delaying action. We must act, not talk or threaten. The Japanese are targeting key U.S. industries and attempting to cripple our ability to compete, while we talk to their great satisfaction. Things will only change when we meet a bullet (Japanese targeting) with a bullet: immediate duties and quotas on a product-by-product basis.

Offensive Position. We must move offensively, rather than defensively. Perhaps we should impose duties on products of targeted industries which would include distributing some portion of the duty to U.S. producers of the product that generates the duty revenue. This tactic would directly discourage targeting and assist U.S. producers compete in any specific product category. I recommend against talk, particularly threats. ACT NOW.

Superior Know-How. One must look at the current trade deficit. The know-how was bought by the Japanese long ago, refined, improved by volume manufacturing and sale of goods initially in Japan in their own protected market and then turned into high volume sales in the U.S. We are going to have to work hard in these targeted areas to maintain a competitive position. We will need the support of our government. Computers themselves appear to be the next target and will fall to the Japanese if we do not act now. Computers are the key to automated manufacturing, and any country controlling that production will have superiority over all others.

We're building our reputation on innovation.

RESPONSE TO WRITTEN QUESTIONS OF SENATOR SASSER FROM JON E. CORNELL

Question of Senator Sasser:

The "MOSS talks," or market-oriented, sector-specific talks between the United States and Japan, are designed — as one commentator put it — to "search for the protectionist needles in the Japanese haystack."

There have been six major rounds of market-opening initiatives since 1982. During that time, the U.S. trade deficit with Japan has soared to $36 billion in 1984. Only two years ago it was $21 billion. The estimate for 1985 is around $50 billion. It seems the more negotiations we have, the higher the trade deficit with Japan becomes.

Nonetheless, high hopes have been pinned on the MOSS talks.

Now, I have heard of references being made by American Embassy staff in Tokyo that "MOSS" in fact stands for "More Of the Same Stuff." An executive of an American high-tech firm in Japan has been quoted as saying that the Japanese response to "MOSS" "is to be a rolling stone."

All flippancy aside, how would you interpret these comments? What is giving rise to these cynical attitudes and what hope is there that things will change?

RESPONSE:

I can address the issue of trade negotiations with Japan from the standpoint of personal knowledge only during the past few years.

During 1982 and 1983 the U.S. government met with representatives of M.I.T.I. in what became known as "The High Technology Working Group". Both the Japanese and U.S. semiconductor manufacturers provided "Industry Advisors" to their respective government negotiating teams. Harris, through S.I.A., provided one of the Advisors to the government negotiators. Our lead negotiators, Clyde Prestowitz of D.O.C. and Jim Murphy of U.S.T.R., were well prepared and knowledgeable of our industry. The trade discussions at that time had resulted from the targetting by the Japanese Industry of the 64K DRAM market and the dumping of that product into the U.S. during the early 1980's. I have attached a copy of a recent editorial by Jack Robertson in Electronic News which relates to this issue.

During the course of the High Technology Work Group negotiation which spanned a year and a half, the Japanese government agreed to a series of reductions to non-tariff barriers to trade and key market opening objectives. Principal amongst these was the commitment to provide "Guidance" to the major semiconductor consumers in Japan to increase their purchases of foreign semiconductors. Subsequent to the signing of the agreement, we experienced a brief increase in orders during a period when semiconductors were in a short supply and subsequently fell back to our historic position of basically selling only products the Japanese industry did not produce. In short, two years of negotiations yielded no measurable permanent results. From our viewpoint, the discussions were a successful delaying and defusing tactic by the Japanese government.

Question of Senator Sasser:

A good deal of the discussion here this morning has related to Japanese targeting and Japanese barriers.

And over the past several months, most of the energy of the trade debate seems to have focussed on the need for the United States to match the Japanese barrier-for-barrier. The idea, of course, is not to grind world trade to a halt, but to encourage a relaxation of barriers. It may well be that the threat of retaliation is an effective means of producing this result.

I want to direct attention for a moment, though, to the possibility of moving this competition away from the de-fensive side, and into the of-fensive side.

We have pointed to some of Japan's targeting tactics as being unfair to American industry.

What tactics are available to American industry to pursue the same course?

What policies should the federal government be pursuing to take advantage of superior American know-how in expanding foreign markets?

RESPONSE:

First, I do not favor what is generally characterized as an "Industrial Policy". Second, the Semiconductor Industry is amongst the most capital and R&D intensive in the Industrial Sector. What is needed from the government is the creation of a pro-competitive environment not through the creation of a formal industrial policy, but through the tax, trade and export statistics which govern our industry.

A principal tool of the government to become an advocate of High Technology industries lies in the tax code.

Incentives to reinvest in R&D as well as recognition through the capital depreciation schedules that semiconductor manufacturing equipment generally becomes technologically obsolete long before it wears out, are two areas the government can take action on now. In addition, it is my understanding that extension of the Investment Tax Credit is not included in the Tax Reform legislation currently under consideration in Congress. To a capital intensive industry such as ours the reduction or elimination of incentives to invest in plant and equipment represents a step backward. Some form of investment incentives should be included in any legislation.

The Anti-Trust laws must be reevaluated with the realities of today's world economy in mind. The ability of companies to join together in pro-competitive joint research must be fostered while at the same time consideration should be given to extension of our anti-trust laws to include actions against foreign competitors in the U.S. who have achieved a competitive advantage through actions in their home country that clearly violate U.S. laws. Our ability to export our products freely to the Free World Market when equivalent foreign products are available is necessary if we are to compete effectively with Asian and European companies. Finally, increased incentives to U.S. citizens to increase their rate of savings to a level comparable to Japan is needed to provide the ongoing capital infusion our growth is dependent upon.

Question of Senator Proxmire:

The representative of the Electronics Industry Association of Japan also testified on July 18 that American "merchant" producers of semiconductors are having difficulties because the trend in the industry is toward integration of supplier and buyer — as is now done in Japan.

In essence he contends that our "merchant" manufacturers are "responsible for filing the S.I.A. petition and are trying to make an international trade dispute out of an irreversible industry trend".

Can you comment on that? Are the American firms becoming integrated just as the Japanese firms about which you complain?

RESPONSE:

There is perhaps no other industry in the United States that better exemplifies the technical and entreprenurial drive that the free-enterprise system is suppose to generate. Most of the leading merchant suppliers did not exist 25 years ago and most developed as the result of the technical innovation of a small group of dedicated people. The short history of our industry is strewn with the failures of large, highly integrated multi-national companies to compete effectively against the small but highly focused merchants. This is not to say that there are not highly successful integrated companies in this country producing for internal consumption but for the most part they do not compete in the open market. In Japan, the six major producers of semiconductors are also the six major consumers. The assurance of supplying 15% to 40% of a company's internal requirements by its semiconductor operation clearly provides a major benefit to the integrated Japanese producer. Since the major captive producers in the U.S. produce only for internal consumption, the issue is "How can the Merchant Suppliers survive and prosper?", not whether they should. Without the U.S. merchant suppliers our electronics industry and much of our defense system stands at risk. Even the large, vertically integrated U.S. companies produce only a small percentage of their overall requirements internally. I would specifically refer you to pages 17 through 33 of the S.I.A. Section 301 Petition dated June 14, 1985 for a more detailed discussion of the Japanese industry's infrastructure. Since virtually all captive production by the integrated U.S.

companies is for internal use and not sold on the open market the only source of supply for the broad electronics and defense sectors is a viable merchant market semiconductor industry.

Question of Senator Proxmire:

On June 16, 1985 the New York Times carried an article analyzing U.S./Japan competition in the semiconductor trade. Mr. Poppelin, a Vice President of National Semiconductor, who has spent much time in Japan, is quoted as explaining the problem in competing with the Japanese this way:

> "Eventually it all comes down to discipline, dedication to detail and the work ethic...before they put a product into production they have done so much detailed planning and review - much more than we have the dedication to do here - that very little goes wrong."

How would you respond to that assertion?

RESPONSE:

One of the principal advantages of the vertically integrated Japanese companies is the ability to test, modify and optimize a new circuit through its internal customer prior to introducing it to the open market. Further, the Japanese concentration on only the high-volume commodity products increases their ability to focus resources on a smaller number of products. Finally, it is the U.S. industry that pioneered the development of advanced microprocessors and applications specific peripheral circuits which by their nature are more difficult to optimize. I would agree, however, that the Japanese attention to detail and strong focus on execution has provided them with a competitive advantage on some selected products. It is an area where our industry can, and must, improve.

Question from Senator Heinz:

Do you fear retaliation by your Japanese customers, or by MITI, for your testimony here today, or for the 301 Petition you have filed?

RESPONSE:

I have seen no evidence to date of discriminatory or retaliatory actions on the part of our customers or MITI towards Harris Semiconductor in Japan.

Question from Senator Heinz:

The Japanese have argued that U.S. quality control is not up to Japanese standards. They are fond of quoting a Hewlett-Packard spokesman from 1979, who makes that same point. How would you respond to those assertions?

RESPONSE:

In the late 70's and early 1980's, the Japanese achieved superior quality levels on a few high volume mass memory products. At that time I would agree that they took the lead in the quality issue. Since that time our industry and certainly we at Harris have implemented major quality improvement programs and developed and deployed statistical process control as an integral part of the manufacturing process. Today most of our major customers including those referenced in your question can detect no measurable differences in the quality levels of Japanese versus U.S. semimconductors.

Question from Senator Riegle, Jr.:

It has been pointed out that the U.S. and Japan have differences in their approaches to corporate financing, in the structure of their capital markets and in the after-tax cost of capital. Some suggest that these differences place capital intensive U.S. firms at a profound competitive disadvantage. I would like to have your evaluation of the nature and importance of these differences. What specific examples could you cite where these differences gave Japanese competitors a clear advantage?

Panel members described the "keiretsu" as a formidable indirect trade barrier. Could you please describe specific experiences that your company has had with the Keiretsu? What steps do you think could be taken by the U.S. to significantly reduce the influence of that barrier to trade?

RESPONSE:

I would first make the point that unless we address the fundamental disadvantages our industry, and for that matter all U.S. manufacturing faces, the successful elimination of barriers to trade will prove to be hollow victory for there will be no U.S. industry to take advantage of the market.

The overall structure of the Japanese economy results in the after tax cost of capital being twice as much for a U.S. company versus his Japanese competitor. The strong dollar, the massive federal deficit, the low U.S. savings rate and the high cost of money all combine to create the most fundamental problem we face. If steps are not taken now to correct this problem dominance by the Japanese and others of all capital intensive manufacturing sectors is a foregone conclusion.

It is difficult to describe specific instances of lost business to the "keiretsu" since the result is a non-happening or non-action. The best example I can cite was in my testimony before the committee when we stopped receiving orders for a particular Harris product when a Japanese source developed in 1980. During the period of severe semiconductor shortages in 1984 we again received orders for substantial quantities of this Memory product when the Japanese source could not supply all the Japanese source could again deliver all our customers requirements in 1985 orders and even requests to quote ceased and we have received no business since.

QUESTIONS BY SENATOR PROXMIRE July 30, 1985

Questions for Mr. Parkinson

1. In testimony on July 18 before the House Ways and Means Committee a representative of the Electronic Industries Association of Japan said the Japanese semi-conductor industry made progress against the U.S. companies in the late 1970's when American producers had quality problems. He referred to a 1980 speech by Richard Anderson of the Hewlett-Packard company, acknowledging quality problems by American producers.

   How do you respond to the contention that the Japanese and even U.S. companies prefer Japanese produced semi-conductors because their quality is better?

ANSWER:

Quality. There is always room to improve quality. Most customers now acknowledge that American quality is on a par with Japan in most IC memory products. Unfortunately, many of these same customers bought heavily in Japanese components over the last five years. Their own growth and margins have now been reduced, and there is a question of their competitive strength in their own fields. Now, they are being targeted, and not as a customer. Many fine companies have been seduced by the Japanese to their detriment. As an example of quality improvement, Micron has added error correct on-chip plus monitored burn-in (AMBYX), moving to a system function that improves quality and reliability on-chip. While the Japanese have only announced they will do this, Micron is now shipping product with electronic error-correct commercially. We will soon apply for Military certification. The Japanese prefer product produced in Japan. We need the same marketing advantage here. We simply need to teach American consumers that buying foreign product exports jobs to other countries.

QUESTIONS BY SENATOR HEINZ July 30, 1985

QUESTIONS FOR INDUSTRY WITNESSES

1. Do you fear retaliation by your Japanese customers, or by MITI, for your testimony here today, or for the 301 petition you have filed?
2. The Japanese have argued that U.S. quality control is not up to Japanese standards. They are fond of quoting a Hewlett-Packard spokesman from 1979, who makes that same point. How would you respond to those assertions?

ANSWER:

Retaliation. Micron is a targeted company due to our product area--DRAMs. The Japanese are trying to take over the industry. By predatory business practices, they are attempting to push U.S. merchant producers, including Micron, out of the market. Once America is out and cannot return, Japan will be free to raise prices. They can then move to targeting computers using DRAMs.

Quality. Hewlett-Packard now acknowledges U.S. product is comparable to Japanese product. As mentioned earlier, Micron's commitment to quality assurance is shown by putting error correction coding on our 256K DRAM.

QUESTIONS FOR MICRON

* In your testimony you state that current market prices for 64K DRAMs are well below any estimated cost of production of any manufacturer, American or Japanese. I understand that the materials involved in manufacture of these chips are a very small component of the price, that the biggest portion is research and development. How do you estimate that? How can you arrive at your conclusion--which if correct is evidence of dumping--that the Japanese cost of manufacture is higher than the price that they are charging for their product?

* You mention that the Japanese are currently without any competition in the 256K DRAM market. Why is that? Is that evidence that the U.S. manufacturers are behind the Japanese in this technology, or are there other reasons?

* In your testimony you state that the Japanese deliberately underpriced American producers in order to gain market share in 64K DRAMs. What evidence do you have of that? Do you have any evidence that their pricing was below their cost?

* If the Japanese are willing to subsidize their product, some would ask, why don't we just take advantage of it and buy cheaper products? How do you respond to that?

ANSWERS TO MICRON QUESTIONS:

1. Materials, labor, and depreciation are a very large component of the price. R&D for DRAMs is less than 10%. Our petition to the International Trade Commission has a detailed analysis. R&D in DRAMs drives large sales. Hence it is a low percentage of price for these products on a per unit basis over the life of the product.

2. The Japanese are attempting to eliminate competition in 256K DRAMs. Current U.S. competitors are IBM (strictly for internal use--they do not sell on the open market), ATT (mostly internal use), Texas Instruments, and Micron. In the last two months, National and Mostek have withdrawn from the 256K market following the lead of Intel (which invented DRAMs) and AMD. This is evidence that the companies do not have an adequate lead to overcome the Japanese advantages of a protected home market and preferential financing. After withdrawing from DRAMs, U.S. producers will soon fall behind Japan in other IC technology. Six months of being out of the market will produce a prohibitive disadvantage for re-entry into any commodity product.

3. Japanese predatory business methods. Documentation of preditory pricing by the Japanese to gain market share is found in the 1983 targeting study published by the Semiconductor Industry Association. We have further documented the practice in Micron's antidumping petition.

4. Japanese subsidy. American computer companies do take advantage by buying the product--witness the growing trade deficit with DRAMs being one of the larger categories now. The Japanese have gained incredible market share in less than 10 years, by selling to American companies. The problem is that DRAMs are a growing percentage of IC sales, determine the field reliability of computer equipment, and are an excellent base to penetrate the computer business.

Please contact me should you have further questions. Thank you for your interest in my testimony.

Regards,

Ward Parkinson

QUESTIONS OF SENATOR SASSER TO RICHARD W. HEIMLICH

Q. 1. THE "MOSS TALKS," OR MARKET-ORIENTED, SECTOR-SPECIFIC TALKS BETWEEN THE UNITED STATES AND JAPAN, ARE DESIGNED -- AS ONE COMMENTATOR PUT IT -- TO "SEARCH FOR THE PROTECTIONIST NEEDLES IN THE JAPANESE HAYSTACK."

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ALL FLIPPANCY ASIDE, HOW WOULD YOU INTERPRET THESE COMMENTS? WHAT IS GIVING RISE TO THESE CYNICAL ATTITUDES AND WHAT HOPE IS THERE THAT THINGS WILL CHANGE?

Answers for Senator Sasser

(1) Widespread cynicism about the MOSS talks reflects years of frustration about negotiations that apparently provided additional opportunities for U.S. firms in Japan but ultimately did not lead to a level of U.S. participation in that market appropriate to our ability to compete. In my judgment, the MOSS process will only add to such frustration.

Q. 2. A GOOD DEAL OF THE DISCUSSION HERE THIS MORNING HAS RELATED TO JAPANESE TARGETING AND JAPANESE BARRIERS.

AND OVER THE PAST SEVERAL MONTHS, MOST OF THE ENERGY OF THE TRADE DEBATE SEEMS TO HAVE FOCUSSED ON THE NEED FOR THE UNITED STATES TO MATCH THE JAPANESE BARRIER-FOR-BARRIER. THE IDEA, OF COURSE, IS NOT TO GRIND WORLD TRADE TO A HALT, BUT TO ENCOURAGE A RELAXATION OF BARRIERS. IT MAY WELL BE THAT THE THREAT OF RETALIATION IS AN EFFECTIVE MEANS OF PRODUCING THIS RESULT.

I WANT TO DIRECT ATTENTION FOR A MOMENT, THOUGH, TO THE POSSIBILITY OF MOVING THIS COMPETITION AWAY FROM THE DE-FENSIVE SIDE, AND INTO THE OF-FENSIVE SIDE.

WE HAVE POINTED TO SOME OF JAPAN'S TARGETING TACTICS AS BEING UNFAIR TO AMERICAN INDUSTRY.

WHAT TACTICS ARE AVAILABLE TO AMERICAN INDUSTRY TO PURSUE THE SAME COURSE?

WHAT POLICIES SHOULD THE FEDERAL GOVERNMENT BE PURSUING TO TAKE ADVANTAGE OF SUPERIOR AMERICAN KNOW-HOW IN EXPANDING FOREIGN MARKETS?

A. (2) It appears unrealistic for the U.S. to match Japan's targeting tactics. U.S. attitudes toward competition policy, protectionism, and subsidies are fundamentally incompatible with pursuing a Japanese style policy. There may be some selective opportunities to mount efforts to deal with particularly serious problems, but these would be exceptions.

To take advantage of superior U.S. know how in expanding foreign markets, the federal government should pursue an aggressive trade policy to enforce reciprocity of market access.

QUESTIONS BY SENATOR HEINZ TO RICHARD W. HEIMLICH

1. Do you fear retaliation by your Japanese customers, or by MITI, for your testimony here today, or for the 301 petition you have filed?

Answers for Senator Heinz

(1) We believe the Japanese will respond in a positive fashion to the issues we have raised.

2. The Japanese have argued that U.S. quality control is not up to Japanese standards. They are fond of quoting a Hewlett-Packard spokesman from 1979, who makes that same point. How would you respond to those assertions?

(2) Hewlett-Packard has publicly reversed its view on U.S. versus Japanese quality and now says the differences are inconsequential. Motorola's quality is better than our Japanese competitors in some areas (e.g., pager sales to NTT where we are the top quality supplier).

QUESTIONS BY SENATOR PROXMIRE

Questions for Mr. Heimlich

1. On June 16, 1985 the New York Times carried an article analyzing U.S./Japan competition in the semi-conductor trade. Mr. Poppelin, a Vice President of National Semiconductor, who has spent much time in Japan is quoted as explaining the problem in competing with the Japanese this way:

> "Eventually it all comes down to discipline, dedication to detail and the work ethic...before they put a product into production they have done so much detailed planning and review - much more than we have the dedication to do here - that very little goes wrong."

How would you respond to that assertion?

Answers for Senator Proxmire

(1) Mr. Poppelin's observation is basically correct assuming that you get to the point where you can compete on the basis of discipline, dedication to detail, etc. We think that our company and several other U.S. companies have proven capable of competing successfully with the Japanese on this basis. The problem in Japan is that you are not given a fair opportunity to show what you can do.

QUESTIONS BY SENATOR RIEGLE
TO MR. HEIMLICH

QUESTION #1

It has been pointed out that the U.S. and Japan have differences in their approaches to corporate financing, in the structure of their capital markets and in the after-tax cost of capital. Some suggest that these differences place capital intensive U.S. firms at a profound competitive disadvantage. I would like to have your evaluation of the nature and importance of these differences. What specific examples could you cite where these differences gave Japanese competitors a clear advantage?

ANSWER #1

There are significant differences in corporate financing in the U.S. and Japan. The Japanese use substantially more debt financing, which is less costly than equity financing, and have lower interest rates. In addition to lower capital costs, the major Japanese firms have "deeper pockets" — an ability to sustain major investment programs despite economic conditions. The effect of these differences is that the Japanese can survive at lower levels of profitability than U.S. firms for prolonged periods. Our experience in dynamic memories is a case in point. They have taken advantage of lower capital costs and higher staying power to overinvest in the dynamic memory business — creating excess capacity and leading to dumping of product into world markets. The result is they have essentially driven U.S. firms out of the business.

QUESTION #2

Panel members described the "keiretsu" as a formidable indirect trade barrier. Could you please describe specific experiences that your company has had with the Keiretsu? What steps do you think could be taken by the U.S. to significantly reduce the influence of that barrier to trade?

ANSWER #2

The "keiretsu" are a significant problem and not only in creating barriers to U.S. products. A preference for sourcing within the Keiretsu is something we have encountered in many cases. But that is only one manifestation of a Japanese economic/cultural system designed to put foreign products at the end of the list. The "keiretsu" also represents a significant potential financial resource for member firms, particularly those in rapidly growing industries. The basic problem here is that Japan's antimonopoly laws are not effectively applied. If counterparts to the U.S. Justice Department and FTC could be created in Japan, using existing Japanese laws, I believe the effects in breaking up these relationships could be dramatic.

QUESTION #3

I understand that Motorola has just announced plans to construct a state-of-the-art semiconductor plant and research facility in Izumi City, Japan. As much as possible, would you describe the major factors that went into this decision? What led Motorola to locate this facility there rather than in the U.S., or somewhere else overseas, such as South Korea, Singapore, or elsewhere?

ANSWER #3

A variety of considerations led Motorola to plan a VLSI facility in Japan including a desire to be close to local customers and gain additional insights into Japanese technology and manufacturing. This type of advanced facility needs to be located in a country with appropriate infrastructure to support it and the lowest possible cost. Current conditions of overcapacity in the marketplace will stretch out our plans.

QUESTIONS OF SENATOR SASSER TO ROBERT N. NOYCE

Q. 1. THE "MOSS TALKS," OR MARKET-ORIENTED, SECTOR-SPECIFIC TALKS BETWEEN THE UNITED STATES AND JAPAN, ARE DESIGNED -- AS ONE COMMENTATOR PUT IT -- TO "SEARCH FOR THE PROTECTIONIST NEEDLES IN THE JAPANESE HAYSTACK."

THERE HAVE BEEN SIX MAJOR ROUNDS OF MARKET-OPENING INITIATIVES SINCE 1982. DURING THAT TIME, THE U.S. TRADE DEFICIT WITH JAPAN HAS SOARED, TO $36 BILLION IN 1984. ONLY TWO YEARS AGO, IT WAS $21 BILLION. THE ESTIMATE FOR 1985 IS AROUND $50 BILLION. IT SEEMS THE MORE NEGOTIATIONS WE HAVE, THE HIGHER THE TRADE DEFICIT WITH JAPAN BECOMES.

NONETHELESS, HIGH HOPES HAVE BEEN PINNED ON THE MOSS TALKS.

NOW, I HAVE HEARD OF REFERENCES BEING MADE BY AMERICAN EMBASSY STAFF IN TOKYO THAT "MOSS" IN FACT STANDS FOR "MORE OF THE SAME STUFF." AN EXECUTIVE OF AN AMERICAN HIGH-TECH FIRM IN JAPAN HAS BEEN QUOTED AS SAYING THAT THE JAPANESE RESPONSE TO "MOSS" "IS TO BE A ROLLING STONE."

ALL FLIPPANCY ASIDE, HOW WOULD YOU INTERPRET THESE COMMENTS? WHAT IS GIVING RISE TO THESE CYNICAL ATTITUDES AND WHAT HOPE IS THERE THAT THINGS WILL CHANGE?

Responses to Senator Sasser's two questions

1. The cynicism regarding negotiations with the Japanese is based in our past failures to accomplish any substantial results. In spite of America's sincere efforts to open and penetrate Japanese markets, very little progress has been made. The semiconductor industry is a case in point.

When semiconductor imports into Japan were officially limited, our penetration was approximately 10% of that market. Fifteen years later that penetration remains essentially unchanged, in spite of the many market opening pledges by the Japanese. Each market opening move has been accompanied by measures which have negated its effect. Given this history, today's cynicism is not surprising. Even so, the semiconductor industry, ever hopeful, is supporting the MOSS talks.

Q. 2. A GOOD DEAL OF THE DISCUSSION HERE THIS MORNING HAS RELATED TO JAPANESE TARGETING AND JAPANESE BARRIERS.

AND OVER THE PAST SEVERAL MONTHS, MOST OF THE ENERGY OF THE TRADE DEBATE SEEMS TO HAVE FOCUSSED ON THE NEED FOR THE UNITED STATES TO MATCH THE JAPANESE BARRIER-FOR-BARRIER. THE IDEA, OF COURSE, IS NOT TO GRIND WORLD TRADE TO A HALT, BUT TO ENCOURAGE A RELAXATION OF BARRIERS. IT MAY WELL BE THAT THE THREAT OF RETALIATION IS AN EFFECTIVE MEANS OF PRODUCING THIS RESULT.

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2. Superior American knowhow is a very perishable commodity. Information diffuses around the world rapidly in this day of global markets. For that reason we cannot rest on our laurels, but must continue to move ahead aggressively.

That requires investment in people, in processes, and in production equipment. All are affected by government, whether in improving our schools' ability to teach science and engineering (with appropriate facilities), subsidizing research, or promoting savings and investment through tax laws. Although I doubt our ability to "target" specific industries, I believe encouragement by the government towards these goals can be helpful.

QUESTIONS BY SENATOR HEINZ TO ROBERT N. NOYCE

1. Do you fear retaliation by your Japanese customers, or by MITI, for your testimony here today, or for the 301 petition you have filed?

Responses to Senator Heinz's questions

1. We have, of course, been concerned about the negative effects of filing a 301 petition on Japanese customer relationships. For that reason some in the industry have not joined in this effort. We have proceeded simply because we have relatively little (market share) to lose.

2. The Japanese have argued that U.S. quality control is not up to Japanese standards. They are fond of quoting a Hewlett-Packard spokesman from 1979, who makes that same point. How would you respond to those assertions?

2. American quality has been better that that of the Japanese, and has lagged at times. Hewlett-Packard's recent data is quite different than the 1979 data so often quoted, showing some American companies' quality better than that of some Japanese companies and vice versa. As a matter of fact, that particular HP critic has now spoken of substantial improvements by U.S. producers.

If American quality were inferior, one would expect that the Japanese share of markets in third countries would be higher than that of American companies. The opposite is true.

QUESTIONS BY SENATOR PROXMIRE

Questions for Mr. Noyce

1. In testimony on July 18 before the House Ways and Means Committee a representative of the Electronics Industry Association of Japan said the Japanese semi-conductor industry made progress against the U.S. companies in the late 1970's when American producers had quality problems. He referred to a 1980 speech by Richard Anderson of the Hewlett-Packard company, acknowledging quality problems by American producers.

   How do you respond to the contention that the Japanese and even U.S. companies prefer Japanese produced semi-conductors because their quality is better?

Responses to Senator Proxmire's questions

1. Same as Senator Heinz's question; see #2

2. The representative of the Electronics Industry Association of Japan also testified on July 18 that American "merchant" producers of semi-conductors are having difficulties because the trend in the industry is toward integration of supplier and buyer -- as is now done in Japan.

   In essence he contends that our "merchant" manufacturers are "responsible for filing the SIA petition" and are trying to make an international trade dispute out of an irreversible industry trend.

   Can you comment on that? Are the American firms becoming integrated just as the Japanese firms about which you complain?

2. The two largest captive suppliers in America - IBM and AT&T - are now producing a smaller percentage of their in-house needs that earlier, so the trend is probably in the opposite direction. Certainly, the fact that most Japanese semiconductor manufacturers are members of large conglomerates (Keiretsus) has made possible the cross-subsidies leading to predatory practices in the U.S. market. But these manufacturers are indeed "merchant" producers. The $1.7 billion of semiconductor products imported from Japan last year were not used by related companies in America, but rather by the great American companies such as IBM and Hewlett-Packard - even though they produced semiconductors themselves. The penetration of the market in the opposite direction - by integrated manufacturers - was essentially zero.

BEFORE THE COMMITTEE

ON BANKING, HOUSING AND

URBAN AFFAIRS

SUBCOMMITTEE ON INTERNATIONAL

FINANCE AND MONETARY POLICY

UNITED STATES SENATE

STATEMENT OF

CHARLES SPORCK
PRESIDENT

NATIONAL SEMICONDUCTOR CORPORATION

ON BEHALF OF THE
SEMICONDUCTOR INDUSTRY ASSOCIATION

JULY 30, 1985

STATEMENT

My name is Charles Sporck, and I am the President and Chief Executive Officer of National Semiconductor Corporation of Santa Clara, California. National Semiconductor had sales last year of $1.8 billion of which $1.1 billion, or approximately two-thirds was semiconductors. National semiconductor is the third largest semiconductor manufacturer in the United States and sells to a broad range of industries including data processing, telecommunications and automotive.

I am appearing today on behalf of the Semiconductor Industry Association, a trade association composed of 48 United States manufacturers of semiconductors. A list of our members is attached.

Status of the U.S. Semiconductor Industry

Today I want to focus on two issues:

- The erosion of our industrial base in the United States
- The long-term effect on the semiconductor industry from Japanese trading practices

But before I do so I want to provide some background on the semiconductor industry.

The worldwide semiconductor industry has approximately $25 billion in total sales. That amount is forecasted to increase to $100 billion within a relatively few years, as most analysts expect the semiconductor industry to grow by 15 to 20 percent per year on average over time.

The semiconductor industry provides the building blocks for the electronics revolution which has taken place in recent years. Today, the results of this revolution are all around us from engine controls on automobiles to reduce pollution and personal computers which have more power than large-scale business computers of only a few years ago, to telecommunications systems which now enable us to direct dial to dozens of other countries in a matter of seconds. The successful flights of the space shuttle would not have been possible without advanced semiconductor technology. And, of course, the defense of the United States is increasingly dependent on advanced microelectronics.

The electronics industry is forecasted to be one of the largest industries in the world by the year 2000. No country can remain a first-rate industrial and military power without a first-rate electronics industry to support the rest of its industrial base. The semiconductor industry is critical not only for advanced products to support the electronics and other leading-edge industries but also because products from this industry are essential to aid in the modernization and thus increased international competitiveness of many of the basic manufacturing industries in the United States.

In the last decade, the U.S. semiconductor industry has been a success story during a period in which many U.S. industries have found it increasingly difficult to compete in domestic and international markets. The semiconductor industry has also been successful in continually reducing the price of its products even during periods of double digit inflation. The average selling price for MOS memory, a representative function, has for instance fallen by approximately 40 percent annually.

This success, plus the recognition that success in the semiconductor industry is the key for success in many other industries, has lead to intense competition for our industry, especially from companies based in Japan.

In part because of that competition, the U.S. semiconductor industry is currently in the deepest recession I have experienced in my more than two decades in this industry. It is estimated by the Semiconductor Industry Association that U.S. semiconductor shipments will decline from 20 to 25% in 1985. The SIA estimates that 18 to 20,000 U.S. employees have been laid off, out of a total work force of about 200,000. What is significant is that this is the first time our industry has suffered a recession without a corresponding general economic decline for the U.S. economy.

This situation has resulted in significantly reduced profits for virtually all U.S. firms in the industry and in a very uncertain near-term outlook.

Capital Spending

The semiconductor industry is very capital intensive and this capital intensity is increasing. The level of capital intensity may come as a surprise to many people who do not expect a "high technology" business to be more capital intensive than many of our basic industries. However, as a June 1984 report by Dataquest shows, the capital intensity of the semiconductor industry has been increasing for the last decade.

CAPITAL SPENDING BY U.S. MERCHANT MANUFACTURERS

(MILLIONS OF DOLLARS)

Year	Capital	Sales	Percent of Sales
1975	$ 170	$ 2,805	6.1%
1976	312	3,519	8.9
1977	381	4,077	9.3
1978	637	5,100	12.5
1979	1,023	6,689	15.3
1980	1,388	8,462	16.4
1981	1,357	7,903	17.2
1982	1,216	8,079	15.1
1983	1,501	9,895	15.2
1984 (estimated)	2,779	13,526	20.5%

The capital spending required to support a dollar of sales has increased from 6% to more than 20%, and that trend seems likely to continue. For instance, the cost to build just one high-volume superchip plant in 1990 will be $200 million, or 10 times the cost of a decade earlier. Japanese semiconductor companies spent an even higher percent of sales on capital and in total dollars are now outspending the U.S. industry even though the Japanese industry is smaller in size.

To put these numbers in perspective, the June 1984 Dataquest report estimated that between 1980 and 1989 the merchant semiconductor industry would have capital expenditures of $33 billion.

The trends at National Semiconductor have been very similar to the trends reported in the Dataquest report, as our capital expenditures increased from $131 million in 1983 to $278 million in 1984 to $400 million in 1985. The capital spending level for a dollar of sales is at least 20%.

Research and Development Spending

In addition to being capital intensive, the semiconductor industry is also very research and development intensive. The research and development intensity of the semiconductor industry is evident from the following information which was taken from the March 22, 1985 issue of Business Week. This shows research and development as a percent of sales.

Year	All Industry Composite	Semiconductor Industry
1981-1982	2.3%	8.1%
1982-1983	2.6%	8.4%
1983-1984	2.8%	7.5%

The 5-year growth rate for the semiconductor industry was 24.8% compared to 14.4% for U.S. industry in total.

Our experience at National Semiconductor has been very similar to the rest of the semiconductor industry.

Fiscal Year	Sales	R&D	% of Sales
1982	$1,104	$109	9.9%
1983	$1,210	$115	9.5%
1984	$1,655	$158	9.6%
1985	$1,788	$205	11.4%

The sales and research and development information shown is in million of dollars. The above information is for the total company.

The research and development intensity of the semiconductor portion of the company is apparent from the following information.

Fiscal Year	Sales	R&D	% of Sales
1982	$ 747	$ 87	11.6%
1983	$ 785	$ 91	11.5%
1984	$1,102	$131	11.9%
1985	$1,150	$176	15.3%

The sales and research and development information is in millions of dollars.

To put these numbers in perspective, during the 5 fiscal years from 1981 to 1985, National spent $683 million on research and development while reporting after tax profits of $135 million.

Thus, the U.S. semiconductor industry which is obviously very capital intensive and research and development intensive is facing increasing foreign competition at the same time our technology advantage is narrowing.

The Erosion of the U.S. Industrial Base

Given this background of the U.S. semiconductor industry, I would like to discuss the erosion of the U.S. industrial base.

Although we have all seen frequent articles about plant closings or companies going out of business, I believe that the problem is more severe than is readily apparent. The problem of the erosion of the U.S. manufacturing base has been partly hidden by the relative strength of the service sector of the economy.

An article in the July 8, 1985 issue of Business Week entitled "Why Service Jobs Can't Keep Stoking the Economy" summarized many of my concerns about the need for a viable manufacturing sector. Among the issues covered in the article is the link between the manufacturing sector and many sectors of the service sector, growth prospects for various services, the cyclical nature of some sectors of a service economy and the pay differential between manufacturing and service jobs. I have included this article in the appendix to my testimony. I have also included in the appendix a recent report by the economic consulting firm of A. Gary Schilling & Company, Inc. which discusses the issue of service and manufacturing in more detail.

The problem of the erosion of the U.S. manufacturing base has also been partly hidden by the fact that in many cases companies don't disappear, but stop manufacturing in the U.S. and source products offshore.

Clearly, the U.S. economy has been going through some rather dramatic changes in recent years. Some of these changes have been the result of deregulation such as in the airline industry, with the resulting financial impact on those carriers whose cost structure resulting from operating in a regulated industry for many years has left them vulnerable to competition from newly formed carriers.

Some of these changes have been the result of the growth of newer technology companies and the relative decline of some companies in more mature industries.

However, the most dramatic change in the U.S. economy in the last decade has been the increasing level of competition that virtually all sectors of U.S. industry face from foreign competitors.

Our response as a society to the challenge of international economic competition is critical to our ability to maintain our industrial base, our standard of living, our military power and our political role in the western alliance and in the world community.

Given the importance of a strong industrial base, it will be helpful to briefly review some statistics on how well we are doing.

First, the U.S. merchandise trade balance has moved from approximately breakeven in 1975 to an approximately $40 billion deficit in 1980, to a deficit in excess of $130 billion in 1984.

Second, the manufacturing capacity utilization rate which is compiled by the Federal Reserve has peaked at a lower level during each successive upturn during the last two decades and has bottomed at a lower level during each successive downturn during the last two decades.

Third, although the United States has been successful in creating millions of new jobs in the last two decades, the increase has been in service jobs, not manufacturing jobs. The unemployment rate in each economic recovery has been higher than in the prior recovery, and the unemployemnt rate during each recession has been higher than in the prior recession. During the 1960s, most economists considered a 4 percent unemployment rate to be normal during a strong economic environment. The U.S. economy has had some strong performance since 1983 and yet the economic forecast released by The White House in late July projects an average unemployment rate of 7.1 percent for 1985 and 6.9 percent for 1986. The unemployment rate is currently 7.2 percent, and it is higher than that in the manufacturing sector of the economy.

Fourth, our trade deficit with Japan continues to deteriorate. Unfortunately, the profile of our trade with Japan resembles that between a developing country and a developed country as the U.S. is generally exporting raw materials to Japan and importing manufactured products in return. My estimate is that our manufactures imports from Japan exceed our manufactures exports to Japan by a factor of at least four to one.

I could continue with a long list of additional statistics indicating the decline in our industrial base and trade position, but I believe that the evidence is clear.

There have been a number of explanations for the decline in our trade position including interest rates and the strength of the U.S. dollar. However, our trade balance with Japan has continued to deteriorate regardless of interest rate differences and currency values. Product quality has been given as an explanation, yet the U.S. semiconductor industry has product equal in quality to what is available from Japan and still cannot gain market share in Japan. I will also add that this inability to increase market share in Japan is not for lack of effort, as U.S. semiconductor producers have been trying for years.

I want to briefly discuss three of the most important issues in our trade problem.

The first issue relates to management practices in some U.S. companies. These practices have included too much emphasis on short-term financial performance, short-term cost reduction efforts rather than long-term development of technological competitiveness, lack of attention to manufacturing efficiency and too many hands off managers in industry.

The second issue relates to trade policy, especially with Japan. This problem is lack of access to the Japanese market and whether caused by government policy or culture, and the answer is clearly both, the result is a very one-sided trading relationship.

Finally, the third issue, and by far the most important and most difficult involves long-term structural problems such as a cost of capital in the United States which is approximately twice what it is in Japan and a savings rate in the United States which is approximately one third of the level in Japan.

To address these issues, we need to do the following.

First, U.S. industry needs a management practice which is more aggressive in the area of manufacturing efficiency, more receptive to risk taking in the area of research and development and takes a long-term view of corporate progress.

Second, government and industry must work together on addressing the negative aspects of our trading partners trade policies. This is especially true with respect to Japan. The current policy of exporting raw materials and importing finished goods is the sign of an undeveloped economy. The opening of assembly plants in this country is not an answer as many of the parts are manufactured outside of the United States and where the research and development is done is critical for long-term industrial success. We need mutual trade with an emphasis on market access.

Third, we need to address the many financial structure disadvantages which impact U.S. industry compared to Japanese industry. To address these disadvantages, we need an entity in government to focus on the international competitiveness of U.S. industry. The first step should be the establishment of a cabinet-level department of trade as recommended in Global Competition: The New Reality which was the report of the President's Commission on Industrial Competitiveness. This report was released in January 1985.

Specific Problems of the Semiconductor Industry

The problems of a declining industrial base, financial structure differences between Japan and the United States and Japanese trading policies all have a direct impact on the U.S. semiconductor industry.

A declining industrial base in the United States impacts the U.S. semiconductor industry by reducing the number of potential customers as firms go out of business or relocate out of the United States. This in turn can impact the cost structure of the semiconductor industry which is very volume sensitive.

Particularly in this recession our major Japanese competitors operate with several major financial structure advantages compared to U.S. companies. The first advantage is that interest rates in Japan are approximately half of levels in the United States. The second advantage of Japanese semiconductor companies is that they have much higher debt-to-equity ratios than would be acceptable in the United States. Because the after-tax cost of debt is lower than the cost of equity, a company with a higher debt-to-equity ratio will have a lower cost of capital. There have been numerous studies on the cost of capital, including those by Chase Financial Policy (1980), the investment banking firm of Paine Webber (1982) and by the U.S. Department of Commerce (1983) and all have concluded that Japanese companies have a cost of capital approximately half that of U.S. companies. A report prepared by the U.S. Department of Commerce in April 1983 gives some indication of the impact of a higher cost of capital. This report found that the cost of capital in Japan was 9.2%, while the cost of capital in the United States was 16.6%. This means that the total cost of a $100 million investment amortized over 15 years in the United States is $275 million, while the total cost over 15 years is only $182 million in Japan. The lower cost of capital obviously translates into a major competitive advantage in a very capital-intensive industry such as the semiconductor industry. A third advantage of Japanese companies is that in many cases their semiconductor operations are divisions of much larger companies which because of their size and diversity can fund the large capital requirements of their semiconductor operations.

In the area of trade policy the U.S. semiconductor industry has been directly impacted by Japanese policies. Obviously, well over 20 years ago the Japanese government recognized the importance of a strong domestic semiconductor industry and proceeded to build up an industry through a combination of government funding, restrictions of foreign investments in Japan and import restrictions. These efforts have been combined with targeting of specific products such as Dynamic Random Access Memories and pricing in the U.S. which appears to be dumping in some cases.

The results of these policies have been a relatively static 10 percent market share in Japan for the last decade. That is below the level that I believe would prevail in an open market, and is why the Semiconductor Industry Association (SIA) filed a 301 Petition in June. This reduced market share impacts our unit volume and cost structure.

The targeting of specific products such as Dynamic Random Access Memories has resulted in pricing which has left fewer U.S. producers for each new generation of products. This also has the effect of making U.S. systems producers increasingly more dependent on Japanese semiconductor suppliers for more of their parts. In many cases these Japanese semiconductor suppliers are also the competitors of the U.S. purchasers in the systems business.

From a financial standpoint, the impact of Japanese trading practices has been quite negative. Obviously, this is a cyclical industry, but lack of market access and pricing practices do impact financial performance and thus the semiconductor industry's ability to finance research and development and capital budgets. To the extent that the future financial performance of the U.S. semiconductor industry is in question, future funding for the industry will become more difficult to obtain and/or more expensive in terms of interest rates or stock price levels.

Conclusion

In closing, I would like to reiterate my three recommendations for addressing the problems of a deteriorating industrial base and trade balance.

First, we must change some of our management practices. Second, government and industry must work together to solve the problems resulting from the trading policies of some of our trading partners. Third, we need to address the financial structure disadvantages of U.S. industry and should begin by establishing a cabinet-level department of trade.

We appreciate your support.

SEMICONDUCTOR INDUSTRY ASSOCIATION MEMBER COMPANY LIST

SIA CORPORATE DESCRIPTION	DIVISION, DEPARTMENT OR SUBSIDIARY
Advanced Micro Devices	
AT&T Technologies	Electronic Components Division
Burroughs Corporation	Micro Components Group
California Devices	
Cherry Semiconductor	Subsidiary of Cherry Elec. Prod. Corp.
Control Data Corporation	
Digital Equipment Corporation	
General Electric Company	Semiconductor Business Division
General Instrument Corporation	Discrete Semiconductor Division
" " "	Microelectronics Group
" " "	Optoelectronics Division
General Semiconductor Industries, Inc.	Subsidiary of Square D Company
GigaBit Logic	
Gould AMI Semiconductors	Subsidiary of Gould, Inc.
GTE Microcircuits	GTE Communications Products Corp. Div.
Harris Semiconductor Sector	Sector of Harris Corporation
Hewlett-Packard Company	Information Technology Group
IBM Corporation	
Intel Corporation	
International Microelectronic Products	
International Rectifier Corporation	Semiconductor Division
ITT Semiconductors Worldwide	Division of ITT Corporation
Linear Technology Corporation	
LSI Logic Corporation	
Microwave Semiconductor Corp.	Subsidiary of Siemens Components, Inc.
Monolithic Memories, Inc.	
Mostek Corporation	Subsidiary of United Technologies
Motorola, Inc.	Semiconductor Products Sector
NCR Microelectronics Division	Division of NCR Corporation
NEC Electronics, Inc.	Subsidiary of NEC Corporation
National Semiconductor Corporation	
Northern Telecom Electronics Inc.	Division of Northern Telecom Ltd.
Precision Monolithics, Inc.	Subsidiary of Bourns, Inc.
RCA Solid State Division	Division of RCA Corporation
Raytheon Company	Semiconductor Division
Rockwell International	Semiconductor Products Division
Siemens Components, Inc.	Colorado Components Division
" " "	Optoelectronics Division
" " "	Special Products Division
Signetics Corporation	
Silicon Systems	
Solid State Scientific, Inc.	Subsidiary of Sprague Electric Company
Sprague Electric Company	Subsidiary of Penn Central Corporation
Telmos, Inc.	
Texas Instruments, Inc.	Semiconductor Group
Thomson Semiconductors	A Division of Thomson-CSF Components Corp.
Unitrode Corporation	
VLSI Technology, Inc.	
Westinghouse Electric Company	Semiconductor Division
Xilinx, Inc.	
Zilog, Inc.	
ZyMOS Corporation	

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EMPLOYMENT

WHY SERVICE JOBS CAN'T KEEP STOKING THE ECONOMY

ALL THE CONSULTANTS IN THE WORLD WON'T OFFSET THE MANUFACTURING SLUMP

There's good news and bad news about jobs. The good news is that service jobs have been booming, more than compensating for the steady loss of manufacturing jobs in recent months. The bad news is that the good news is unlikely to last.

The spectacular boom in service employment over the past year has surprised most forecasters. Since January, service jobs have risen by more than 600,000. This has more than offset the loss of 163,000 jobs in manufacturing.

But many economists question whether services can continue to grow that rapidly. And some believe that even if the service sector—which includes a wide range of businesses, from health care to accounting to retail stores—could continue to generate jobs at the heady pace of recent months, it would not be enough to keep the economy expanding strongly. "We may get enough service-sector jobs to prevent recession," says Lawrence Chimerine, chairman of Chase Econometrics. "But we cannot get enough growth in services to keep the economy growing at 4%, or even 3%."

Such pessimism is based partly on the growing belief that service job growth is not as stable as economists had long thought. It's also based on the fact that service jobs do not pay as much as manufacturing jobs. Therefore, service jobs would have to continue to expand much faster than the rate at which the manufacturing sector loses jobs in order to make up for the loss of income.

CALLING THE TUNE. But strong growth in service jobs depends to a large extent on the health of the manufacturing sector. That sector, which employs only 20% of the total nonagricultural work force, manages nonetheless to churn out nearly 50% of the nation's gross national product. "Manufacturing still calls the tune of the U.S. business cycle," says Stephen S. Roach, a senior economist at Morgan Stanley & Co. Adds Wall Street economist A. Gary Shilling: "Forecasters who believe the economy will continue to grow strongly are convinced that services can grow independently, even when the goods-producing sector slumps. Service jobs, however, are linked to the health of manufacturing."

Economists had long believed that the service sector was largely impervious to the business cycle. But some of the biggest and fastest-growing services—financial and business services, transportation, public utilities, and communications—sell a large and growing portion of their output to manufacturing. And according to an analysis by Shilling, growth in these services has slowed sharply during the last three recessions.

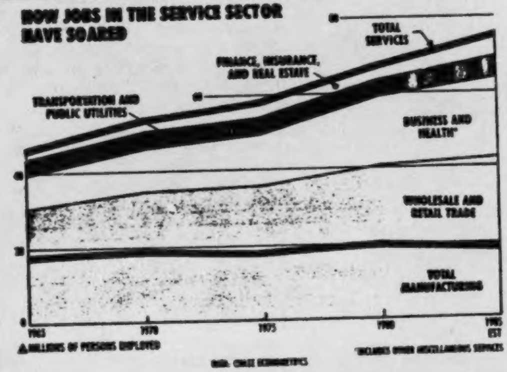
So far, the slump in manufacturing has not hit employment growth in the services. In fact, the rate of growth of service jobs has accelerated sharply since last summer, while manufacturing employment has slumped. "What happens in manufacturing hits services with a lag," explains Shilling. "The super growth in services now reflects in large part the boom in the demand for goods in the first two years of the recovery. The slump in manufacturing will begin hitting services in coming months."

Some key service industries may already be under pressure. Profits in wholesale and retail trade peaked at $49.4 billion in the final quarter of last year, notes Robert J. Barbera, chief economist at E. F. Hutton & Co. In the first quarter of this year, those profits fell to $45.5 billion. "This occurred," Barbera points out, "while employment in the trade sector surged." This profit squeeze is expected to put a damper on trade employment growth.

Other service jobs are similarly vulnerable. The fast-growing business and health care services (chart) now account for about one-fifth of all private-sector service employment and have added jobs at an annual rate of about 7% a year since 1960. But manufacturers, in their efforts to keep costs under control, are expected to cut back on business services. Prime candidates are such business services as advertising, legal, and consulting. "If industrial America is dying out," says Lester C. Thurow, an economist at Massachusetts Institute of Technology, "then those services used by industry will die out, too."

Thurow also argues that health care, which employs more than 6.2 million people and has been among the fastest-growing services, is also vulnerable to cutbacks. That's because spending on health care has risen so fast over the past decade—doubling to 11% of GNP—that both the government and the pri-

HOW JOBS IN THE SERVICE SECTOR HAVE SOARED



▲MILLIONS OF PERSONS EMPLOYED

*INCLUDES OTHER MISCELLANEOUS SERVICES

DATA: CHASE ECONOMETRICS

CHART BY BRIAN MCDONALD/BW

vate sector are beginning to cap costs.

The import boom in the current expansion has also helped fuel the service job boom, since foreign goods sold in the U.S. must be shipped, stored, and marketed. But a weak economy would also mean fewer imports and fewer service-related jobs. And Thurow notes that "the notion that services are insulated from foreign competition is being broken down. Foreign advertising, retailing, and banking are making inroads."

Not all economists, of course, are pessimistic about the outlook for service job growth. "There is no question that the service sector can absorb the jobs lost in manufacturing," says Brookings Institution economist Robert Z. Lawrence. "So long as there is sufficient demand, and the policymakers can deal with insufficient demand, people will be employed."

But even if service employment continues to soar, it probably will not be sufficient to keep the economy expanding at 4%—the rate needed to keep unemployment down and the financial system afloat. So far, service job gains haven't translated into healthy economic performance. Although service jobs are booming, GNP rose a scant 0.3% in the first quarter. And according to the Commerce Dept.'s "flash" estimate, growth rebounded to only 3.1% in the second quarter. "Over the last 12 months as manufacturing slumped," notes Chimerine, "real growth has averaged 2%."

JOB GENERATOR. Service jobs do not generate as much growth as manufacturing jobs because they are less productive and lower paying. Private-sector service jobs pay only about 70% of the average in manufacturing, according to Shilling. The gap between manufacturing and service wages has been closing in recent years as productivity has picked up. And although technological advances will continue to boost service productivity, it's likely to occur slowly.

"You can standardize some tasks," says economist Robert A. Gough of Data Resources Inc. "But ultimately there are only so many insurance policies you can write in an hour." And other economists argue that there are limits to how much technological gains in services can add to growth. "We can't have a high standard of living giving each other heart transplants," says Thurow.

Moreover, rising output per worker would reduce the demand for labor in service industries, since fewer people would be required to accomplish the same tasks. Thus, the service sector's power as a job generator would diminish even as the jobs paid better. In the final analysis, the best hope for continued strong growth in service employment would be a rebound in manufacturing.

By Karen Pennar and Edward Mervosh in New York

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CAN EMPLOYMENT IN SERVICES SAVE A SOFTENING ECONOMY?

Summary and Conclusions:

The service-producing sector now dominates the U.S. economy: the importance of its industries has increased steadily in the post-war era and in 1984 they accounted for 68% of all private-sector jobs in this country.

In the early stages of the current recovery, both goods- and service-producing employment grew quickly; since last August, though, they have been following divergent courses. Growth in service-producing jobs accelerated from 3.9% to 5.1% at annual rates. In contrast, growth in goods-producing jobs slowed down dramatically, from 5.2% to 1.6%, largely reflecting increased import penetration into American markets.

Based on these facts, some analysts have concluded that the service-producing sector can expand all by itself and, because of its new preeminence, carry the entire economy. Moreover, some have suggested that a service-oriented economy will be less cyclical: service-producing industries suffer less from periodic downturns, and the brunt of recessions henceforth will be borne by foreign manufacturers of imported goods.

We disagree, and thus doubt forecasts of imminent growth based on services strength. Several considerations suggest this:

- Current employment trends may be deceptive. For example, apparent extraordinary growth of service-producing employment, and its independence from the goods sector, vanish when it is recognized that many service-producing industries "service" imported as well as domestic goods. Also, strong demand for goods in this recovery has masked the true damage to the manufacturing jobs inflicted by imports. Manufacturing may have suffered a permanent job loss, which is more ominous than the temporary job losses of past cyclical downturns.

- Service industries are cyclical — though this fact is often hidden by a strong growth trend. Downward fluctuations around an upward trend will still have depressing effects, though. Also, imports may amplify — and not dampen — the cyclicality of the domestic economy. The auto industry -- and import market share gains during recessions -- illustrate this.

- A shift from goods-producing to service-producing employment tends to reduce the value of overall production and income. This, coupled with signs of weakening consumer spending, implies sluggish growth ahead for services and the economy as a whole.

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The Service Sector -- The New Workhorse of the Economy?

Without question, the service-producing sector is now the dominant employer in the U.S. economy. As shown in Chart I, the share of service-producing employment in total private nonagricultural payroll employment has been rising steadily in the post-war period, and reached 68% in 1984. Indeed, in the past eight months, service-producing industries — which include transportation, public utilities, communications, wholesale and retail trade, finance, insurance, real estate, and services, such as business services and health services — accounted for 85% of all new jobs created in the private sector. Also, during this period employment growth in the service-producing sector actually accelerated: as shown in Table I, it has now reached 5.1% at an annual rate, compared to 3.9% in the first 20 months of the recovery.

CHART I

SERVICE-PRODUCING EMPLOYMENT AS A PERCENT OF TOTAL PRIVATE NONAGRICULTURAL PAYROLL EMPLOYMENT

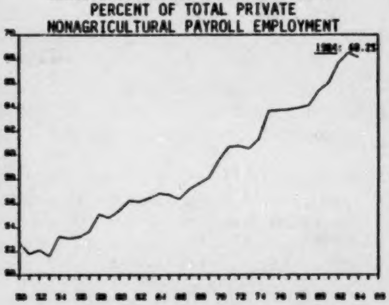


TABLE I

EMPLOYMENT GROWTH
(annual rates)

Sector	Nov. 1982- July 1984	Aug. 1984- April 1985
Total Private	4.3%	4.0%
Goods-Producing	5.2	1.6
Mining	-1.2	-1.2
Construction	7.6	11.2
Manufacturing	5.0	-0.4
Durables	6.7	-0.3
Nondurables	2.8	-0.6
Service-Producing	3.9	5.1
Trans. & Publ. Utilities	1.8	2.0
Wholesale Trade	3.4	4.7
Retail Trade	4.1	5.2
Fin., Ins., & Real Estate	3.4	4.8
Services	4.6	6.0
Business Services	12.2	8.4
Health Services	1.8	4.1

This is a marked contrast to the growth pattern in goods-producing employment. There, jobs are being decimated by the continued influx of imports. In manufacturing, which accounts for 75% of all output of the goods-producing sector, employment has actually experienced a decline since last August, following a 5.0% annual rate of growth at the earlier stages of the recovery.

This situation — continuing growth in service-related employment, with little, if any, growth in the goods-producing area — is different from the norm for an expanding economy. Nevertheless, many analysts seem inclined to take heart in the performance of service-producing employment and activity, rather than being alarmed by a downturn in manufacturing. They are convinced that the service-producing sector can continue to grow independently, even when the goods-producing sector slumps. Indeed, some conclude that as more and more goods production moves abroad, the U.S. economy will be less cyclical, since goods-producing industries are inherently more strongly affected by cyclical fluctuations than are service-related industries.

We seriously question this point of view. In fact, several considerations make forecasts of robust economic growth in the quarters ahead based on the strength in the service-producing sector appear doubtful. First, in the present recovery employment growth in service-producing industries has been weaker — and the recent drop in manufacturing jobs more ominous — than the numbers may at first suggest. Secondly, service-producing industries are not only themselves cyclical, but are related to the health of domestic goods-producing industries. Finally, the signs of a continuing weakness in the economy are more suggestive of a recession than a rebound. We have developed seven reasons to support this point of view.

1. Spectacular Job Growth — A Statistical Deception?

Some argue that unusually rapid and continuing growth in service-producing employment in this recovery illustrates its independence from the goods sector. However, this growth may not have been as overwhelming as it appears. On the one hand, service employment growth in relation to economic activity as measured by GNP has indeed been spectacular. But it should be remembered that GNP tallies only the output of U.S. nationals and does not include imports. Many service-producing industries, however, "service" goods that come from abroad, as well as American-made products. For example, imports need to be transported to their final destination, stored, and sold. Therefore, growth in service employment should also be compared to an alternative measure of economic activity which adds imports to GNP and which we will call "total activity."

The first line of Table IIA shows the growth in gross national product in the first two years of the current recovery, and in the first two years of each of the three previous recoveries. The second line shows the growth in total activity during the same periods. Note that in the current recovery, the annual rate of growth in total activity is a full percentage point greater than that of GNP, the difference being due to the surge of imports. No such difference can be detected in the previous recoveries. The implications of this difference are illustrated in Table IIB, which shows the growth in service employment in relation to the growth in real GNP and real total activity. We see that the rate of change in service-producing employment during the current recovery was 72% that of GNP, the highest of the last four expansions and distinctly higher than in the expansions of the early 1970s and early 1960s. But if we include imports in GNP and relate the growth in service employment to the growth in real total activity (as shown in the second line of the table), it becomes clear that services employment has not, after all, grown exceptionally fast in the current upswing.

TABLE IIA

GROSS NATIONAL PRODUCT VS. TOTAL ACTIVITY
(annualized percent changes in constant dollar levels)

	82:IV to 84:IV	75:I to 77:I	70:IV to 72:IV	61:I to 63:I
Gross Nat'l Prod.	6.0%	5.6%	5.8%	5.1%
Total Activity	7.0	5.7	6.0	5.2

NOTE: Total Activity equals gross national product plus imports. It records all purchases and production in the economy.

TABLE IIB

CHANGES IN PRIVATE SERVICE-PRODUCING EMPLOYMENT AS A PERCENT OF THE CHANGE IN REAL GNP AND REAL TOTAL ACTIVITY, OVER THE FIRST TWO YEARS OF RECOVERIES

	82:IV to 84:IV	75:I to 77:I	70:IV to 72:IV	61:I to 63:I
Serv/GNP	72%	70%	59%	45%
Serv/TA	61%	68%	67%	44%

2. Strong Demand for Goods — Covering Up Losses?

The strength of the current economic recovery obscures underlying weaknesses in the U.S. employment situation. The damage done by imports to manufacturing jobs in this country may be even more ominous than is now apparent.

Table III examines employment growth in the first two years of the current recovery and compares it with the previous three recoveries. Column A in each case shows the annual growth rate of employment over the two-year periods in each sector. Column B shows each sector's share of all new jobs created over the two-year periods, while Column C shows the share of total employment of each sector at the end of each two-year period. It is interesting to note that at the end of the first two years of the current recovery, the share of new jobs created in goods-producing sectors, 33.5%, exceeded by almost two percentage points the share of goods-producing jobs in total employment. In other words, goods-producing employment was rising more rapidly than its share of total employment, reflecting very strong demand for goods. In contrast, during the mid-1970s recovery the share of new jobs created in the goods industries barely exceeded their share in total employment, and in the previous two recoveries, it did not even equal the total employment shares.

TABLE III

GROWTH IN EMPLOYMENT OVER FIRST TWO YEARS OF RECOVERIES

Sector	Nov. 82 to Nov. 84			Apr. 75 to Apr. 77			Nov. 70 to Nov. 72			Feb. 61 to Feb. 63		
	A	B	C	A	B	C	A	B	C	A	B	C
Total Private	4.4%	100.0%	100.0%	4.0%	100.0%	100.0%	3.2%	100.0%	100.0%	2.2%	100.0%	100.0%
Goods-Producing	4.7	33.5	31.7	4.1	37.0	36.3	3.1	37.2	39.3	2.2	42.7	43.5
Mining	-0.9	XX	1.3	5.6	1.7	1.2	0.3	0.1	1.0	-3.6	XX	1.3
Construction	7.1	8.6	5.5	5.0	7.1	5.7	4.8	9.2	6.4	2.0	5.5	6.2
Manufacturing	4.5	25.2	24.8	3.8	28.2	29.3	2.8	28.0	31.9	2.5	39.6	35.9
Durables	6.2	20.2	14.8	3.8	16.5	17.2	4.3	23.9	18.5	3.7	32.7	20.3
Nondurables	2.1	4.9	10.0	3.8	11.7	12.1	0.9	4.0	13.3	0.9	6.9	15.6
Service-Producing	4.3	66.5	68.3	3.9	63.0	63.7	3.4	62.8	60.7	2.3	57.3	56.5
Trans & Pub Ut	2.1	3.2	6.6	1.4	2.6	7.0	0.9	2.1	7.5	0.0	0.0	8.3
Wholesale Trade	3.8	6.3	7.1	3.1	5.4	7.0	2.1	4.5	6.8	1.6	5.0	6.9
Retail Trade	4.7	22.4	21.0	4.4	22.5	20.5	4.5	26.6	19.7	2.0	16.7	16.0
Fin., Ins., R.E.	3.4	5.8	7.2	3.3	5.6	6.6	3.6	7.2	6.4	2.5	6.7	6.0
Services	4.8	28.8	26.5	4.8	27.0	22.6	3.6	22.5	20.4	4.1	31.2	17.3
Bus. Services	12.1	12.9	5.2	6.7	5.6	3.4	5.0	4.6	3.0	8.0	6.5	2.0
Health Services	1.8	3.3	7.7	5.3	8.8	6.8	5.5	9.4	5.7	5.6	9.1	3.8

Legend: A, annualized percent change in employment over the two year period;
B, share of all new jobs created over the two year period;
C, share of total employment at end of two year period;
XX, employment declined.

Yet, at the same time imports have been making deep inroads into manufacturing. Table IV (see page 5), taken from our earlier report With the Surge in Imports, Can Irresistible Pressures for Protectionism be Far Behind? (March 13, 1985), shows the growth of total market in a number of industries in the current expansion. The market here is defined as shipments of domestic producers plus imports. The industries on this list (31 out of the universe of 159 industries) were selected because at least one-half of their supply growth in the current recovery came from imports, as shown in the third column. The last three columns show the import penetration ratios, and it is clear that in a number of them, imports have not only increased rapidly in relation to the total market, but now account for over half of it.

In effect, demand for goods in this recovery has been so extraordinary that, despite the loss of U.S. goods production and employment to imports, the domestic goods-producing sector could still increase employment faster than normal in the first two years of the recovery. However, if domestic production had been allowed to meet all that demand, employment growth in manufacturing probably would have continued since last summer, instead of petering out. Furthermore, those "unrealized" jobs that went abroad probably represent a permanent loss to the economy, as we discuss later in Point 5. That's why these losses may prove to be a heavier burden on the economy than jobs lost in past cyclical downturns. (See Point 3 below.)

TABLE IV

INDUSTRIES WHERE IMPORTS COMPRISED AT LEAST 50% OF SUPPLY GROWTH DURING THE RECOVERY (1982 - 1984)

Industry	Growth of Supply Since 1982	Growth of Imports Since 1982	Share of Growth in Supply Met by Imports (1982- 84)	Import Penetration* 1972	1982	1984
Foundry Equipment	1.0%	108.3%	866.7%	NA	8.4%	17.2%
Footwear, ex. Rubber	8.8	43.5	108.7	17.1%	38.2	50.4
Construction Machinery	2.3	44.6	133.0	3.4	6.8	9.6
Rubber & Plastics Footwear	3.1	12.0	128.8	41.7	33.7	36.6
Paper Industries Machinery	2.3	16.2	106.4	12.6	14.9	16.9
Blowers and Fans	15.6	92.4	103.8	3.6	17.5	29.2
Air & Gas Compressors	2.8	40.5	98.8	6.0	6.7	9.2
Earthenware	33.4	44.8	92.5	61.3	69.0	74.9
Luggage & Personal Goods	39.7	89.2	87.1	20.7	38.7	52.4
Farm Mach. & Equip.	4.8	39.8	84.2	9.2	10.1	13.5
Costume Jewelry	20.5	86.2	78.1	10.4	18.5	28.6
Dolls	76.6	156.6	77.0	21.8	37.7	54.7
Textile Machinery	20.9	40.8	76.6	36.6	39.3	45.7
Radio & TV Sets	45.8	69.6	75.1	34.9	49.4	57.5
Women's Blouses	25.4	85.5	75.1	14.9	22.3	33.0
Women's Suits & Coats	14.5	62.6	74.4	7.3	17.3	24.5
Medicinals	13.1	44.4	71.2	22.0	21.1	26.9
Chinaware	19.8	33.6	71.1	41.0	41.8	46.7
Men's & Boy's Shirts & Nghtwr.	28.0	49.9	70.1	17.8	39.4	46.1
Primary Zinc	53.5	81.2	66.2	28.4	43.6	51.6
Elec. Risistors	17.6	57.2	64.7	NA	19.9	26.6
Transformers	3.3	22.8	59.2	3.5	8.6	10.3
Teleph. & Telegr. Equip.	15.5	177.8	57.6	2.1	6.0	12.1
Welding Apparatus	4.5	48.8	57.4	NA	5.3	7.5
Men's & Boy's Suits & Coats	15.8	44.8	56.8	7.1	20.1	25.1
Printing Trades Mach.	18.1	58.5	55.2	8.5	17.1	22.9
Musical Instruments	14.1	36.9	55.1	14.9	21.0	25.2
Men's & Boy's Outwear	19.9	49.9	53.9	8.7	21.4	26.8
Nitrogenous Fertilizers	18.8	78.4	53.8	4.3	12.9	19.4
Men's & Boy's Work Clothing	12.9	55.7	53.6	7.3	12.4	17.1
Pulpmills	24.7	43.5	50.7	30.4	28.8	33.1

*Import Penetration is imports divided by supply (U.S. product shipments plus imports).
Source: U.S. Industrial Outlook, U.S. Department of Commerce estimates for 1984 data.

What will be the impact of the lost market shares shown in Table IV on employment? A study by the Labor Department estimates that in 1981 for every $1 million in sales (in constant dollars) the U.S. auto industry generated a total of 47 jobs: 16 in auto production itself and 31 in complementary industries such as steel, parts suppliers, and tire producers. The numbers for the steel industry are even larger. There, $1 million in sales generated 58 jobs: 22 in steel and 36 in associated industries. Since 1982, the U.S. merchandise trade balance, excluding agricultural products, has declined in constant dollar terms by $33 billion. Using the auto and steel job numbers as a rough proxy for all industries, we calculate that rising imports could have stripped over 1.5 million jobs from the U.S. economy — mostly in manufacturing.

CHART II

IMPORTS OF CONSUMER GOODS AS A PERCENT OF TOTAL PERSONAL CONSUMPTION OF GOODS

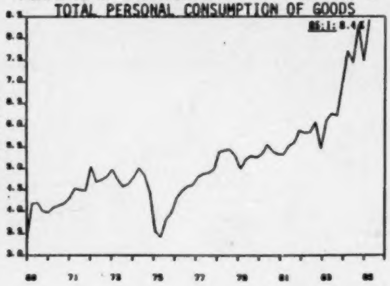


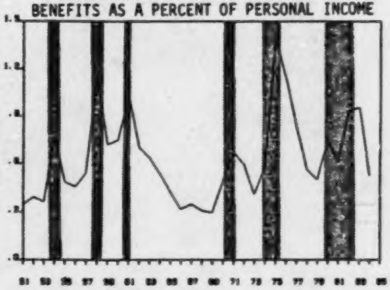
Chart II shows inroads made by imported consumer goods on the American market. Here we note the steep rise in the share of imports in total goods consumption. Had such an increase in imports occurred without the tremendous demand for goods, import penetration would have taken a far heavier toll on jobs in goods-producing industries. With imports now firmly entrenched here, the job losses in goods-producing industries could be very substantial during the next recession, or even when the economy settles down to a slower, more sustainable pace of growth.

3. Goods and Services — Links in the Same Chain

It is easy to assume that despite the recent weakness in goods employment, service-producing employment can continue to grow independently because this has been the case in the past. However, such periods were usually associated with periods of recession or very weak growth, and involved a temporary shift in consumption patterns between domestically produced goods and domestically produced services typical of a cycle downturn. These periods were very different from the present situation, in which the critical shift is from domestically produced goods to imports, and this shift is likely to be permanent.

CHART III

GOVERNMENT UNEMPLOYMENT INSURANCE BENEFITS AS A PERCENT OF PERSONAL INCOME

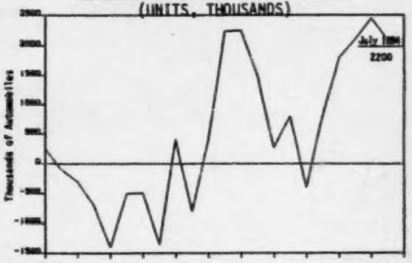


Shaded areas indicate recessions.

Recessions in the post-war period have typically lasted for about a year or even less. During a short recession like that, income levels in real terms generally flatten out, but do not decline, in large part because unemployment benefits from the government and private industry compensate for a large portion of the income loss. Chart III shows the sizeable increases in government unemployment insurance benefits as a percentage of personal income during those recessionary periods.

CHART IV

DEFERRED AUTO REPLACEMENT DEMAND (UNITS, THOUSANDS)



*Based on deviation from average scrappage rates over time

But even though income levels hold up well in recessions, consumers tend to postpone the purchases of autos and other durable goods: the old car can be kept for a year longer. Their income is channeled instead into services and to a lesser extent into nondurable goods. The consumption of services goes on almost uninterrupted, and consumer-related service jobs are little affected. However, once the recovery begins, consumers shift back into heavy durable goods expenditures. As shown in Chart IV, deferred auto demand — and the demand for other durables — does build up. As the pent-up demand is released, the lost jobs in goods-producing industries are recreated.

A permanent loss of jobs in goods-producing industries is something quite different. Income levels cannot be maintained indefinitely, as supplemental unemployment benefits in the private sector and unemployment benefits from the government, which are designed to deal with temporary job losses, eventually run out. Recently, for example, Congress and the Administration agreed that there would be no extension of unemployment benefits for the newly unemployed, nor would these benefits be extended further for those already receiving them. Initially, this loss of income results in severe cutbacks in spending on durable goods, leaving services virtually unaffected. But this lasts only for a limited time. As we noted before, eventually old cars and other old durables must be replaced, and as more normal spending patterns are resumed, expenditures on services are reduced. Thus, the loss of potential income growth -- due to the permanent loss of goods-producing jobs to imports -- will result in a loss in service jobs as well.

This goods and services job linkage is clearly illustrated by the impact of recent geographic displacements of goods-producing jobs on the entire economy of the affected region. For example, as goods employment declined in the Rust Belt, so did jobs for retailers, business service workers, etc. Many of those goods-producing jobs originally fled to the Sun Belt, but now that they are moving on overseas, the same loss of service jobs is likely in that region, as well.

4. Cyclicality Camouflaged by A Growth Trend

Although periodic ups and downs are on the whole greater in the goods sector, it is also true that some service-related employment is highly cyclical, as shown in Table V. Often, this is masked by a strong growth trend, but fluctuations around an upward trend are still cyclical and have a depressing effect on the economy. Thus, even if service-producing industries don't actually lay off workers, they clearly do reduce the rate at which new employees are added. Either way, the net result is the same: i.e., more people without work.

TABLE V

TREND GROWTH RATES AND DEVIATIONS
FROM THE TREND DURING RECESSIONARY PERIODS

	Trend Growth Rates		Deviations from Trend During Recessionary Periods		
Sector	1975 to 1983	1969 to 1979	7/81 to 12/82*	6/79 to 7/80*	12/73 to 7/75**
Total Private	2.2%	2.4%	-4.7%	-3.0%	-4.4%
Goods-Producing	0.4	0.8	-8.3	-5.8	-8.5
Mining	3.1	4.5	-13.1	3.2	3.5
Construction	1.4	2.2	-7.6	-6.5	-13.5
Manufacturing	0.1	0.4	-8.2	-6.2	-7.9
Durables	0.1	0.7	-10.7	-7.8	-9.4
Nondurables	0.1	0.0	-0.8	-3.6	-5.6
Service-Producing	3.2	3.4	-2.9	-1.4	-1.9
Transp. & Publ. Util.	1.1	1.5	-6.0	-4.9	-5.8
Wholesale Trade	2.2	2.9	-4.4	-1.7	-2.0
Retail Trade	2.6	3.3	-2.8	-2.6	-2.2
Fin., Ins., & R.E.	3.5	3.5	-2.9	0.0	-2.6
Services	4.4	4.4	-2.4	-0.3	-0.7
Business Services	7.1	6.2	-6.8	-2.5	-4.7
Health Services	4.7	5.7	-0.7	0.8	1.0

NOTE: Deviation from trend is the difference between the annualized percent change during the recessionary period and the trend growth rate.

* Based on 1975-83 trend
** Based on 1969-79 trend

Note in the service-producing portion of Table V that transportation & public utilities, wholesale trade, and business services all have shown considerable negative deviations from their trend growth rates during recessions, particularly the 1981-82 downturn. This is not surprising since, as shown on Table VI, these service-producing industries sell considerable portions of their output to goods

TABLE VI

SHARES OF TOTAL SERVICE-PRODUCING SECTOR OUTPUT BOUGHT AS:
1. Intermediate Purchases (used in production process); or
2. Final Purchases

	Intermediate Purchases			Final Purchases	Total
	Manufacturing	Agricultural, Mining, and Construction	Service-Producing	By: Households, Businesses, and Government	
Business Services	22%	11%	47%	20%	100%
Transportation & Warehousing	25	7	26	42	100
Wholesale & Retail Trade	15	8	6	71	100
Public Utilities & Communications	25	3	31	41	100
Finance & Insurance	6	4	36	54	100
Real Estate & Rental	3	5	21	71	100
Health & Personal Services	4	1	13	82	100

NOTES: 1) This table is based on data from the Commerce Department's Input/Output Tables for 1977 (the most recent available).
2) Interpretation of entries: The 22% in the Business Services row in the Manufacturing column refers to the share of total Business Services output purchased by manufacturing firms on current account.

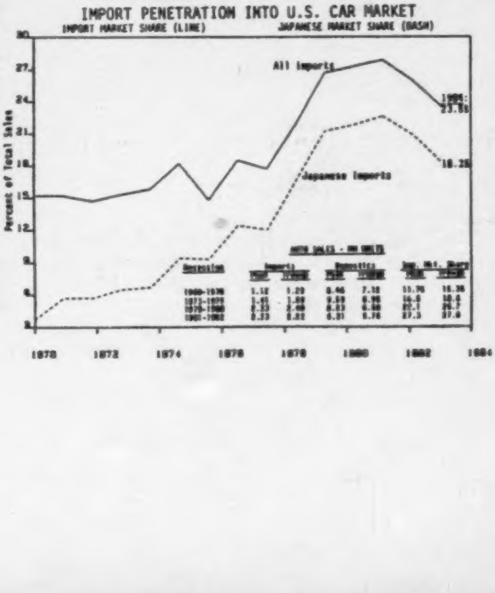
producers. For example, 22% of business services' 1977 output was purchased by manufacturing companies in the course of their production process. Agricultural, mining, and construction firms accounted for another 11% of the business services' sales. Note also that transportation & warehousing, wholesale and retail trade, and public utilities & communications all sell meaningful amounts of their output to either manufacturing or agriculture, mining, and construction industries, or both. In effect, then, the cyclicality in goods-producing areas does spread to these service-producing areas. It is particularly worth returning to Table III and noting in the first column that business services, the most cyclical of the service industries, has experienced the most rapid growth in the current recovery, rising at a 12.1% annual rate.

5. Imports: Meek Victims of the Next Recession?

Some have suggested that the economy is less cyclical now because the substitution of imports for domestic goods means that foreign manufacturers will bear the brunt of an overall downturn in spending here. This thesis, too, is becoming highly questionable. A case in point is the auto industry. Here, far from being insulated from business cycles, U.S. producers are increasingly becoming their principal victims, as shown in Chart V. In each of the four recessions since 1969, the share of imports in the total U.S. auto market jumped anywhere from one to four percentage points. In three of those recessions — including the 1982 recession, when import restraints were in place -- sales of imported cars actually increased in unit terms. By contrast, sales of domestic cars fell during all four recessions. Furthermore, Japanese producers enjoy a price cushion that will protect

CHART V

IMPORT PENETRATION INTO U.S. CAR MARKET



them during any period of weak auto demand. Finally, strong catch-up demand during the two years of economic recovery -- which coincided with import restraints -- has created a backlog of demand for Japanese cars, which, along with normal downtrading to cheaper, more fuel-efficient cars, will keep their sales growing in the next recession.

Although the situation with autos is extreme, it isn't by any means unique. The strength of the dollar in recent years has allowed many foreign producers to undercut U.S. manufacturers' prices in American markets. It has also provided them with enough additional funds to build considerable marketing arms in this country, which will make them more effective competitors even during future business downturns. This is true in a number of high-tech industries, including equipment built for the semiconductor industry. Thus, imports may feel proportionately less pressure in a period of weakness than their domestic counterparts.

6. The Income Factor — Exchanging More for Less

In the longer run, a shift from a goods-producing to a service-producing economy tends to reduce the value of overall production and incomes. Unfortunately, the availability of complete data for service-producing industries has lagged far behind its availability for goods-producing industries — despite the fact that services are now dominant. Consequently, we often concentrate on employment data without realizing that jobs in the service-producing sector tend to pay less, and add less value than jobs in the goods area.

Table VII shows this very clearly. For example, in the motor vehicle industry, average compensation per employee in 1983 was $37,200, and value added per employee, which includes compensation, profits, and other income flows, was $57,000. By contrast, business services had compensation per employee of $18,300, and value added of $26,300. Goods-producing industries overall had compensation per employee of $26,400, which was 40% greater than the $18,800 of service-producing industries, and value added of $39,700, 35% greater than the $29,500 of service industries. Of course, it can be argued that many goods-producing jobs are leaving our shores precisely because our workers are overpaid compared to foreign competition, but that's a different story. The point is that as these goods-producing jobs disappear because of imports, we are left with not only lower-paying jobs, but also ones that add less to total income flows. And it is not surprising that with this reduced income flow, the economy is currently showing signs of significant weakness, if not recession.

TABLE VII

COMPENSATION AND VALUE ADDED PER EMPLOYEE
(1983 data; current dollars)

	Compensation	Value Added
Goods-Producing	$26,400	$ 39,700
Mining	34,200	117,400
Construction	23,800	33,200
Manufacturing	26,600	37,000
Durables	28,500	36,200
Primary Metals	33,500	44,100
Motor Vehicles	37,200	57,000
Nondurables	24,000	38,300
Service-Producing	$18,800	$ 29,500
Transp. & Pub. Util.	31,500	61,900
Wholesale Trade	25,200	43,500
Retail Trade	11,900	19,800
Fin., Ins., R.E.	24,300	31,900
Services	17,800	24,300
Business Services	18,300	26,300
Health Services	20,400	25,300

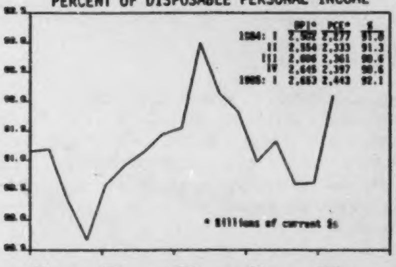
7. A Slowdown in Consumer Spending — A Sign of a Weakening Economy

The income loss associated with rising imports has its greatest impact on consumer spending. Recently, this sector of the economy has been in something of a fool's paradise, and when the chickens come home to roost, service employment could be curtailed considerably.

Consumer spending was strong in 1983 and 1984, when individuals were making up for the dry spell in spending in the 1979-82 recession. Although this catch-up was completed last fall, consumers were induced to continue their buying spree by giveaway prices at Christmas: general merchandisers were overstocked with goods. More recently, auto companies have joined the fray by offering cut-rate financing to boost sales.

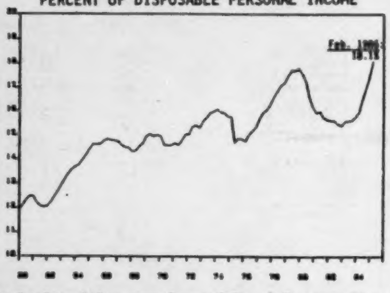
In effect, consumers have been buying ahead. Growth of personal consumption expenditures like the first quarter's 4.7% inflation-adjusted annual rate seems unlikely to endure.

CHART VI
PERSONAL CONSUMPTION EXPENDITURES AS A PERCENT OF DISPOSABLE PERSONAL INCOME



In addition, domestic spending is concentrating increasingly on imports and hence flowing out of the country, resulting in commensurately less domestic employment growth and income creation. Not surprisingly, the result shown in Chart VI is that consumption expenditures as a percent of disposable income have increased sharply in early 1985, and as noted in Chart VII, consumer installment debt as a percentage of disposable income reached new highs in February. Furthermore, debt is much more onerous today than it was at the previous peak in 1979, since interest rates are much higher now, and double-digit inflation is no longer present to reduce the burden of repayment. Many mortgage-holding consumers realize this as they literally walk away from their houses: rapid appreciation of real estate which they anticipated at the time of purchase has not occurred, and they are left with carrying costs they cannot or will not pay.

CHART VII
CONSUMER INSTALLMENT DEBT AS A PERCENT OF DISPOSABLE PERSONAL INCOME



This suggests that consumer spending is on its last legs, and since it makes up two-thirds of total economic activity, the downside risks to the economy are considerable. As we point out in the March 9, 1985 Quarterly Economic Report, a slowdown, if not an outright recession, may develop in the near future. In effect, then, the recent weakness in jobs in goods-producing industries is the counterpart of the strength in imports. The difference has been made up by unsustainable rates of borrowing. This hardly suggests a permanent situation in which goods-producing jobs can languish while service-related jobs continue to grow rapidly and sustain economic growth.

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